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Brave Men and Compassionate Women:
Gender Attitudes in England and Finland

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Thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy in the faculty of Social Sciences at the University of Kent, Canterbury, September 2006.

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Abstract

The aim of this thesis is to examine gender-related attitudes in England and Finland. The thesis investigates the development of these attitudes in children, the effects that age and sex have on these attitudes, and how culture influences the perception of sex and gender roles. Specifically, this thesis explores the attitudes and stereotypes relating to academic ability, occupational choices, family roles and personality traits.

Review of literature shows that overall males tend to be more traditional and stereotypical in their gender attitudes than females. In relation to age, it has been found that the older children get, the more flexible they become in their attitudes to the roles of the two sexes. Cross-culturally, very little research has included both English and Finnish samples, but based on international indices of gender equality Finland appears to be more progressive in its gender-related policies than England.

In Study One (N=3313) results of secondary analysis on the ISSP data on gender role attitudes are presented. The results show that despite the Finnish perceiving women's employment as more normative than the British, they also hold traditional family values in a greater esteem. Study Two examines gender attitudes of Finnish and English children and adolescents (N=1856), and the results indicate that the Finnish participants hold more stereotypical attitudes than the English, and that attitudes towards personality traits and occupations are strongly influenced by gender stereotypes across the nationalities and age groups. Studies Three (N=302) and Four (N=304) further examine attitudes towards instrumental and expressive personality traits, occupational stereotypes and ambivalent sexism. Study Five (N=204) compares Finnish adults' scores on ambivalent sexism to other international samples and examines developmental trends in the endorsement of hostile and benevolent attitudes towards women.

It is concluded that despite being viewed as a haven of gender equality, the gender attitudes are more traditional in Finland than in England. Possible reasons for this are discussed, and suggestions for further research outlined. Overall, the research presented suggests that while the 21st century children and adolescents still believe that men and women are innately different, this perception of differences does not directly determine their future aspirations in terms of occupations or parental roles.

Memorandum

The research for this thesis was conducted at the Department of Psychology, University of Kent, Canterbury. The theoretical and empirical work herein is the independent work of the author. Intellectual debts are acknowledged in the text. Some assistance from other people was necessary in conducting the empirical work as this took place in schools and universities. Such assistance was limited to practicalities of research however, such as distributing questionnaires.

The author has not been awarded a degree by this, or any other university, for the work included in this thesis.

Acknowledgments

First and foremost, I'd like to thank my supervisor Professor Diane Houston. She has not only been an exceptional supervisor but also an important mentor and friend. Her academic guidance has been accurate, inspiring and gratefully received as has her generous and earnest advice on dates, weddings, houses, babies and gymnastics. I've been very lucky to have Diane as my supervisor, and throughout this process I have felt very well looked after both academically and in general.

Special thanks go to Matt, who has during the course of this thesis gone from being a 'guy at the gym' to a date to a fiancée to a husband. He has been continuously encouraging, optimistic and most of all patient; truly a rock that has enabled me to do all that I want to do without going completely insane or losing perspective on what's really important.

I'm very fortunate to have a lot of friends who have all in their own ways been invaluable during the past four years. Particular thanks go to Lindsey who has always known exactly what it's like, and who has been an amazing support both emotionally and practically. For completely opposite reasons, a mention goes to Hulda, Megs, Josie, Heckles, Sas, Beth, Kezi, Mimi, Imo, Jordie, Cath and Jael. Undoubtedly, this thesis would have been done faster, better and with much less stress if the girls weren't such a big part of my life. However, I would not change a thing as not only do they provide me with continuous joy and challenge, but they also demonstrate on a daily basis just how brave, ambitious and determined little compassionate girls can be.

Finally, this thesis is dedicated to my mum and dad, Sini and Pekka. Not once in my life have I doubted the availability of their support whether emotional, practical or intellectual. Not even when I wanted to be a footballer. For their trust, love and support I'll be forever grateful.

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Introductory Chapter: Influences behind the present day gender roles

"Biologically and temperamentally...women were made to be concerned first and foremost with child care, husband care, and home care."

- Dr. Benjamin Spock (circa 1950), U.S. paediatrician and author

"Wife does not mean equal partner in marital coupling but instead someone who pops out kids, scrubs the toilet with a smile on her lips and a song in her heart and spends any spare time gazing at photographs of her beloved husband until it's time for him to come home and mess the place up so she has something to do tomorrow."

- Michael Noer (2006), U.S. journalist

The quotations above, both by men, are dated approximately half a century apart from each other yet the views expressed on the roles of the two sexes seem very similar. This thesis however takes as its starting point the assumption that the roles of men and women, as well as gender attitudes in general, have changed more than Michael Noer's views indicate. This introductory chapter discusses some of the factors that have shaped the roles of the two sexes into what they are today. These factors include religion, emergence of the concept 'childhood', and the entry of women into labour market. Finally, this chapter summarizes the aims of the thesis.

Religion

Historically, women have been considered not only intellectually inferior to men but also as a major source of temptation and evil. In Greek mythology it was a woman, Pandora, who opened the box and brought plagues and unhappiness to mankind. According to Christianity, Eve tempted Adam to eat the forbidden fruit hence causing God to curse the ground, and to make humankind mortal. All major religions of the world differ to some extent in their views about the roles of the two sexes but they do share the assumption that men and women are inherently different.

However, the original doctrines of all main religions have as their starting point the supposition that in the eyes of the God, men and women are essentially equal. This egalitarian core is expressed differently within each of the world's religious traditions, though there are some similarities (Scovill, n.d.). In Judaism, Christianity and Islam, the egalitarian core is expressed in terms of the equal creation of the two sexes. Each of these religions affirms that because both women and men are made in the image of God, they are equal and thus are to be treated equally and given identical rights (Scovill, n.d.). In Hinduism and Buddhism, the egalitarian viewpoint is based on the fact that both men and women are able to reach liberation from the cycle of reincarnation (Scovill, n.d.).

According to Christianity, Eve was created from Adam’s rib in order to provide him with companionship. However, the order in which the two sexes were created has been seen as a justification for male dominance over women. During the lifetime of Jesus, and in the generation after his death, Christianity was marked by egalitarianism in both its teachings and its institutional structures (Scovill, n.d.). Such egalitarianism, however, was replaced with patriarchal institutional structures after Christianity spread through the Mediterranean world in the 2nd century CE and when it became the official religion of the Roman Empire.

Structural changes were accompanied by a theology which identified the patriarchal social order with the divine created order and thus insisted that the proper relationship between men and women was one in which men ruled and women were obedient (Scovill, n.d.). Thomas Aquinas, the 13th century Christian theologian, said that woman was "created to be man's helpmeet, but her unique role is in conception... since for other purposes men would be better assisted by other men." However, Sumner (2003) argues that traditional Christian thinking is not the same thing as biblical thinking about women, and that the biblical sentiment of equality between the sexes has been misinterpreted by the early church leaders in order to enhance the patriarchal model of male dominance.

Islam arose in the Arabian Peninsula in the 7th century CE after the Prophet Muhammad received a series of revelations calling all people to commit themselves to Allah (Scovill, n.d.). The rules of Qur'anic law were a marked improvement for women in comparison to the customs and the laws in the surrounding Arabic culture. The Qur'an states: "And they (women) have rights similar to those (of men) over them, and men are a degree above them" (Qur'an 2:228). Such degree is Quiwama (maintenance and protection), which refers to the natural difference between the sexes. According to this degree, biological differences between men and women entitle 'the weaker sex' to be protected by men (Badawi, 1971).

Following the prophet's death women's status in both religious institutions and the broader Islamic culture declined dramatically (Scovill, n.d.). According to Scovil (n.d.), the decline was due to the consolidation of religious power into male hands that linked to Islam's spread to areas which were more rigidly patriarchal than the Arabian Peninsula. While the Qur'an is theoretically the most authoritative Islamic text, it is often read through the lenses of existing cultural assumptions about appropriate social relations and a number of less authoritative sacred texts which are more in line with patriarchal values (Scovill, n.d.).

Hinduism emerged in India around 1500 BCE when Aryan invaders of India mixed their religion with the practices and beliefs of the indigenous people (Scovill, n.d.). Like other religious traditions, present knowledge about women's roles in Hinduism indicates that their position was highest during its earliest periods (Scovill, n.d.). When the caste system was formalized in the 1st century BCE, the rise of the Brahmin class in regards to worship rituals meant that women or lower caste males could no longer play an active part in religion (Scovill, n.d.). Women's subordinate position was further reinforced by the social shift to prepare female children for marriage at an early age hence limiting their education to domestic duties (Scovill, n.d.).

According to doctrines of Hinduism, a woman's father protects her in childhood, her husband protects her in youth, and her sons protect her in old age as a woman is never fit for independence (Scovill, n.d). According to Manu's codes, an ideal wife is obedient, self-sacrificing and fully devoted to her husband. Despite Hinduism's endorsement of patriarchal social structure, Scovill (n.d.) argues that the roots of Hinduism strongly argue for egalitarian relationship between the sexes.

Overall, it seems that the influence of religion on gender roles has originated not only from the original doctrines that define the 'rules' of different religions, but also from the interaction of these doctrines with the patriarchal societies across the world. The basic texts of all three religions discussed here seem to share the ideology that men and women are born equal albeit different in disposition. Nevertheless, all three also seem to have somewhat lost this underlining sentiment as it has conflicted with the realities of patriarchal societies where men were deemed superior to women. It seems reasonable to conclude that although originally the religions discussed here have not been advocates of gender inequality, the early authorities within each religion have used them as a tool of maintaining male dominance within societies. Therefore, across the world modern day gender roles have largely developed from the patriarchal interpretations of religious doctrines, and been enforced by the religious leaders as the God's will, and as the only way to live morally.

History of childhood

The first major work into the history of childhood was Aries' *Centuries of Childhood* (1962). Aries argued that there was no concept of childhood as a state different to adulthood before the 19th century and therefore, even if parents did feel affection for their offspring, they did not fully understand how to respond to emotional needs of their children. This argument gained further weight with the work of Stone (1977) on the history of the family and family relationships in 1500-1800. Stone too focused on the 'evolution' of the family through these three centuries, arguing that the family changed from being a structure in which relationships were formal and repressed to the current structure of 'domesticated nuclear family' (Thomas, n.d.).

During pre-industrial age, England as well as most of Europe was largely agricultural. According to Thomas (n.d.), amongst the poor, children were put to work at early ages on the farm; sowing seeds, chasing birds, and performing other less demanding chores. If children could not be of use at the family farm, they were sent to work elsewhere. This applied to both sexes, although boys were more likely to be put to work earlier while girls stayed home a little longer to help their mother (Thomas, n.d.). Children whose help or income was not necessary were often put to school to receive a form of elementary education which would help them acquire the necessary literacy and mathematics they would need in life.

Stone (1977) and Aries (1962) argued that there was a growing awareness of childhood as a state different from adulthood in the sixteenth and seventeenth centuries (in Thomas, n.d.). According to them, society was beginning to appreciate that children were not miniature adults, but were substantially less mature, and had strong needs for protection, love and nurturing. Society was becoming more aware of the importance of parental socialisation and it was increasingly realised that socialisation determined, to great extent, the kind of adult a child would eventually become (Thomas, n.d.).

The emergence of the idea of childhood can be traced in the artistic development over time (Thomas, n.d.). During the Middle Ages children were customarily portrayed as miniature adults with no childlike characteristics. Plumb (1975) argued that from the late seventeenth century onwards children can be seen playing, sketching and amusing themselves in portraits, which shows there was a definite concept of childhood emerging in this period. Stone (1977) argued that once society became aware that childhood was a distinct state from adulthood, the relationship between parents and children changed. Parents became more aware of the needs of children, they were more equipped to respond to them, and give their children the care and protection they needed (Thomas, n.d.).

According to Thomas (n.d) the Protestant Reformation brought along increasingly harsh disciplinary methods. Protestantism emphasised the notion of Original sin, and did not advocate baptism as a means of salvation for children (Thomas, n.d.). Protestants argued that faith alone determined salvation, and therefore for a child to be saved faith was essential. There was now added pressure on parents to ensure that their children fully comprehended the basics of Christianity, especially their own sinfulness, and need for repentance and salvation. Sather (1988) argued that following the Reformation, the relationship between parents and children became characterised by harshness and cruelty, as physical punishment became the norm, especially amongst Puritans. The phrase "he who spareth the rod hateth his son" was universally repeated (Thomas, n.d.).

Another development brought along by the Reformation was the 'educational revolution' of the sixteenth century. Education was seen as a prime requisite of gentility, for not only did it cultivate the mind, but it distinguished gentle persons above the poor, and justified their privileged position (Thomas, n.d.). With such a high regard being attached to education, rich parents increasingly ensured that their sons had a decent education.

Attitudes towards female education amongst the wealthy also changed during this period. In the Renaissance years, the education of women was encouraged to some degree.

Fraser (1984) argued that during Queen Elizabeth's reign, wealthy men felt a pressure to have their own daughters educated. However, with the Queen's death in 1603 there was an increasing desire to exclude females from learning Latin and the classics (Thomas, n.d.). As the seventeenth century wore on, the difference in the educational expectations of the sexes became more marked (Thomas, n.d.). Parents were now encouraged to have their daughters educated in those subjects deemed suitable for girls: sewing, knitting, music and French (Thomas, n.d.).

The modern institution of childhood is thought to root from the Victorian era. During this era, childhood was for the first time accepted as a separate period from infancy and adulthood. Ironically, the Industrial Revolution during this era led to an increase in child labour, but due to the campaigning of the Evangelicals, and efforts of author Charles Dickens and others, child labour was gradually reduced and halted via the Factory Acts of 1802-1878 (Thomas, n.d.). The Victorians concomitantly emphasized the role of the family and the sanctity of the child, an attitude that has since remained dominant in Western societies.

By the end of the nineteenth century, while the lives of most children were still dominated by poverty, ignorance and illness, the idea of child-centeredness as a key focus for policy development had firmly taken root, paving the way for the twentieth century, which has been described by many commentators as 'the century of the child' (Clarke, n.d.). The idea of childhood as sacred, and the notion that children were entitled 'to be children' had profound effects on the role of women who were now required to not only 'produce' children, but to reorganise their lives in order to create a carefree childhood for their offspring.

Changes in women's roles from industrialization onwards

Across the Western world, industrialization during the 19th century created jobs for women in large quantities. However, industrialization affected women in two different ways as it overlapped with the Victorian ideals that perceived women as devoted homemakers and doting mothers and wives. Therefore, it could be argued that industrialization affected women very differently depending on their socioeconomic status. Many women from the rapidly growing urban working class entered the quickly appearing factories that required cheap labour force. However, among the middle- and upper classes, the role of women was increasingly seen as just mothers and wives who could not work outside homes, and who also required increasing amount of paid domestic help. The growing demand for domestic help in turn created more employment opportunities for working class women and children.

Overall, women's entry to labour force was enforced by the two world wars, during which whole societies depended on women's labour as working-aged men were required to fight the wars. In the UK for example, an estimated two million women replaced men in employment between 1914 and 1918, resulting the proportion of women in employment to raise from 24 per cent in 1914 to 37 per cent by the end of 1918 (Bourke, 2003). Although many women lost their jobs to men returning from the front, the antecedent for women's employment had been set, and women were not keen to give up their newly required independence (Bourke, 2003).

In general, employment has been acknowledged as a key to women's independence and to greater overall gender equality (Veikkola, 2002). Indeed, the basis of women's subordinate position in relation to men has been defined by their lack of personal income (Veikkola, 2002). In patriarchal societies women have gone from financially relying on their fathers to being reliant on their husbands. Although women's paid labour has been gradually increasing since the Victorian era, Twenge (2001) argued that the most rapid changes in women's employment took place between 1930s and the end of the millennium.

Roles within families

Before industrialisation, and according to the Protestant Ethic, men were expected to act as though they did not have any commitments other than work (Kant, 1977). This supported the traditional sex role ideology, which saw men as breadwinners performing a work role and women as mothers and wives performing family duties at home. Recently however, there has been a notable change in orientations to work and family roles as societal changes have forced the belief in the separateness of work and family to shift towards recognition of the interdependence of the two entities.

Changes in responsibilities of men and women are creating a new set of expectations, beliefs and attitudes of what men and women should do in the context of family (Cabrera, Tamis-LeMonda, Bradley, Hofferth & Lamb, 2000). Growing proportion of contemporary men accept egalitarian values both in providing and nurturing, and generally express a desire to be different from their own fathers who spent a lot of time at work thus remaining distant from their children (Kaufman & Uhlenberg, 2000). On a societal level, the positive outcomes of involved fathers have been recognised, and positive associations have been made between involved fathers and higher levels of cognitive development and social competence in infants; greater academic achievement in middle childhood; and more desirable educational, behavioural and emotional outcomes in adolescence (Cabrera et al., 2000).

However, the changes in the workforce have not been fully mirrored in the family life. It is well documented that fathers' involvement in family life has not changed at the same pace than has mothers' involvement in work-life (e.g. Milkie, Bianchi, Mattingly & Robinson, 2002). Despite culturally idealised involved father that shares household tasks and childcare, average mothers continue to spend twice as much time doing childcare than fathers (Milkie et al., 2002).

The aims of the thesis

There are four main aims of this thesis. Firstly, this thesis will examine gender attitudes, gender roles and future aspirations held by today's children and adolescents. The supposition that children's gender-related attitudes and gender roles they endorse reflect the wider attitudes of the society, and that these attitudes influence their aspirations and future plans, will be empirically investigated. The empirical studies will be based upon existing psychological literature and it is anticipated that the findings will help to identify current trends in gender-related attitudes that children and adolescents hold.

Secondly, the present research aims to further the understanding of the effects that age and sex have on children and adolescents' sex-role development and gender-related attitudes. The effects of age and sex have been widely examined yet the results obtained remain inconclusive and often contradictory (e.g. Glick & Hilt, 2000; Helwig, 1998). Overall, it is agreed that children become more flexible in their attitudes as they become older, but that this increasing flexibility rarely equates with personal willingness to engage in counter-stereotypical behaviours (Kohlberg, 1966, Powlishta, 2003).

There is a consensus among researchers that boys are more traditional in their gender-related attitudes than girls; an effect that mirrors findings that among adults men tend to be more traditional than women (Glick & Hilt, 2000). This gender effect has typically been attributed to men currently having more power than women do (Glick & Hilt, 2000). Hence, men and boys face greater losses than women and girls if traditional gender roles and the present status quo of two sexes are dismantled. Despite the consistent finding of boys and men being more traditional than girls and women, it is important to examine the relationships between both sexes' gender attitudes in different domains, and also to further explore the interaction of sex and age, as well as the sex effects in different cultures.

Thirdly, this thesis will examine the effects of culture on gender attitudes. The effect of culture on gender attitudes has been less widely examined than those of age and sex despite increasing multiculturalism, globalisation and the escalating mobility of employees within industrialised western countries. The term 'culture' has been defined as "the set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs" (UNESCO, 2002).

Examining cultural differences in gender-related attitudes is important as differences in attitudes are inevitably related to the cultural context in which people live, and children develop in. Culture inevitably characterizes society's values, norms and priorities and hence also affects both legislation and social structure. In order to explore the relationships between cultural attitudes, norms and policy, the current research will be carried out in two western European industrialised countries, the UK and Finland. These two countries offer an ideal opportunity to explore the differences in gender attitudes brought along by differences in cultural values, policy environments and social structures. The rationale for focussing on these two countries is explored at greater depth in Chapter 3.

Fourthly, the present thesis will combine aspects of developmental and social branches of psychology. Traditionally, social psychologists have explored gender roles and related attitudes among adults or university students, while developmental psychologists have been predominantly interested in the effects of age on different measures. Research in social psychology has advanced the study of gender stereotypes by showing that beliefs about differences between men and women are similar across different cultures, and shared by both men and women (Désert & Leyens, 2006; Smith & Bond, 1999).

However, social psychological research has often neglected the developmental aspects that influence children's behaviour (e.g. cognitive abilities in understanding items; Signorella & Liben, 1985), while developmental psychologists have overlooked social processes that influence children just as they do adults (e.g. ingroup bias in gender attitudes; Lutz & Ruble, 1995). The current research binds together these two sectors of psychology and aims to make a contribution towards more successful collaboration of the two in the field of gender attitudes.

Chapter 1: Children's sex stereotypes, gender-role assumptions and ambivalent sexism

This chapter will define the term 'stereotype' and examine the different stereotypes that are associated with men and women. Specifically, the gender stereotypes relating to personality, academic achievement and occupational choices are discussed as these are the central themes investigated throughout the present thesis. The way these stereotypes are internalised by children is discussed, as is the notable resiliency of these stereotypes even in the face of disconfirming evidence. Developmental trends in gender stereotyping are examined together with the effect that sex has on forming and holding stereotypical attitudes. The notion that stereotyping does not necessarily equate with negative attitudes, an argument that has been brought forward by Glick and colleagues in their theory of Ambivalent Sexism (1996, 1998, 2000), is also discussed.

Definition of stereotypes

Stereotypes are generalisations about a person or a group of persons. People develop stereotypes when they are unable or unwilling to obtain all of the information needed to make fair judgments about people or situations. In the absence of the full picture, stereotypes allow us to 'fill in the blanks'. Allport (1954, p. 191) defined a stereotype as an "exaggerated belief associated with a category that justifies or rationalizes our conduct in relation to that category". Basically, using stereotypes offers a 'shortcut' allowing us to use limited cognitive efforts when organizing information about social world.

Stereotypes are often created and perpetuated with innocent motives, but especially unfavourable stereotypes often lead to discrimination and persecution. Positive stereotypes exist too, and are equally harmful as can lead to individual characteristics, competencies or shortfalls being overlooked.

All categories into which people can be classified come with stereotypes attached. According to commonly held stereotypes young people are egocentric, Jews rich, Americans loud and supermodels ditsy. The current research will examine the stereotypes attached to sex, and namely on how such stereotypes are perceived by children and adolescents. As sex is such a stable, dichotomous, biological, exhaustive and 'naturally based' tool of categorisation, it remains in a person's life consistently from infancy to old age. Being a male or a female is probably the most prominent and influential category humans belong to, and given the salience of biological sex, it is not surprising that pervasive stereotypes exist (Beyer, 1999).

The development of gender stereotyping

The most traditional stereotypes have rendered women as fragile, emotional and needy, while men have been stereotyped as fearless, independent and undemonstrative (Broverman, Vogel, Broverman, Clarkson & Rosenkrantz, 1972). Broverman et al.'s (1972) widely recognised study also found that males and females endorse these stereotypes equally. In general, commonly held gender stereotypes[1] found in numerous studies typify the idea that men are more instrumental and women are more expressive (e.g., Best & Williams,

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[1] As the word 'gender' refers to the attributes, behaviours, personality characteristics, and expectancies associated with a person's biological sex in a given culture, the term 'gender stereotype' rather than 'sex stereotype' is used throughout the thesis.

1993; Martin, 1987). Due to this division of characteristics, men have traditionally been deemed more suitable for positions of power and for tasks where physical strength or mental toughness is required, while women have been thought fitting for caring, nurturing and domestic roles.

Studies have shown that children quickly acquire stereotypes about the appropriate behaviour, social roles and activities for men and women (Fisher-Thompson, 1993; O'Keefe & Hyde, 1983; Signorella, Bigler, & Liben, 1993; Turner, Gervai, & Hinde, 1993). The stereotypic structure of gender schemata has been shown to bias information processing so that memory for stereotypically consistent information is better remembered by children than is information inconsistent with traditional gender roles (e.g., Liben & Signorella, 1993; Stangor & Ruble, 1980). In addition, children who hold highly stereotyped gender attitudes are more likely to exhibit such a biased memory pattern (e.g., Signorella et al., 1993). Reconstructive memory biases have also been observed in studies where children misremember or reinterpret stereotype-inconsistent information as consistent with gender stereotypes (e.g., Ruble & Stangor, 1986; Martin & Halverson, 1983).

Furthermore, individuals with strong gender stereotypes tend to use gender as an organizational framework for memory (i.e., clustering, Signorella, 1992). These sorts of memory biases may function to maintain gender stereotypes in the face of disconfirming evidence (e.g., Stangor & McMillan, 1992). Thus, even though the last few decades have seen men and women crossing the boundaries of gender stereotypes and taking on increasingly androgynous roles, traditional gender-role stereotypes persist. Even when faced with behaviours that are clearly inconsistent with these stereotypes, individuals retain, and even strengthen, their stereotypic beliefs about men and women's roles (Katz, 1986).

In addition to memory processes, social judgment processes also have been implicated in stereotype perpetuation. For example, Meehan and Janik (1990) found that children form illusory correlations regarding stereotypic behaviours of men and women. They exposed children to equal numbers of traditional and non-traditional pictures of men and women. The traditional pictures portrayed men and women performing stereotype consistent behaviours, and the non-traditional pictures showed men and women performing behaviours inconsistent with gender stereotypes. Following their exposure to the pictures, the children estimated that the frequency of stereotype consistent pictures was far greater than the frequency of stereotype inconsistent pictures. Meehan and Janik concluded that children have a tendency to overestimate the frequency of events that confirm their stereotypes.

Knowledge of the development of beliefs about gender can lead to a better understanding of how children construct systems of beliefs about what people are generally like. Understanding how children's beliefs map onto societal stereotypes could have implications for the development of self-conceptions and behaviour. For example, there is evidence that children who endorse stereotypes about which gender is most talented within a particular domain often distort their own expectations and visions for the future so as to be consistent with these stereotypes (Eccles, Wigfield & Schiefele, 1998).

A useful framework for considering the relationship between gender and children's beliefs about gender differences is Sperber's notion of epidemiology of ideas (Sperber, 1996), which describes a dynamic interplay between public representations in the culture, and mental representations in the minds of individuals. According to Sperber, mental and public representations often influence each other, but remain conceptually distinct. From this perspective, children's beliefs about gender differences can be viewed as mental representations that are influenced by a range of widely available popular entertainment, educational practises and colloquial language.

As with adults, gender stereotypes affect the way a child is viewed by others, what is expected and assumed of him or her, and also how the child envisions him or herself. On the basis of gender, children may be encouraged or discouraged from certain choices and may learn to view themselves as fitting well or poorly into different roles (e.g. Eagly, 1987; Eccles, 1987; Räty, Vänskä, Kasanen & Kärkkäinen, 2002). As Lips (2004) points out, gender is one of the most important bases on which possibilities continue to be embraced, ignored or relinquished. Of particular interest to the current research are gender stereotypes that relate to personality, education and occupations, as well as the effect biological sex or age has on perception and endorsement of these stereotypes.

Personality and trait stereotypes

Bakan (1966) was first to describe the concept of agency, which reflects a focus on the self as an autonomous agent, and argued it to be typical of men. As an opposite of agency, he described the concept of communion that reflects a focus on others and on relationships, and argued this to be typical of women. Williams and Best (1982) conducted a large cross-cultural program of research into gender stereotypes and found across 30 nations a tendency for men to be viewed as competitive and assertive while women were viewed as emotional and selfless. However, as Guimond, Chatard, Martinot, Crisp & Redersdorff (2006) note, it is important to keep in mind that gender stereotypes are beliefs about the characteristics of men and women as a group, not characteristics that are seen to apply to the self.

The status difference between men and women may account for the consistent finding that it is more acceptable for females to portray masculine characteristics than it is for males to portray feminine characteristics (Powlishta, 2003). Even preschoolers are aware of men having more status than women (e.g. Glick & Hilt, 2000; Lockheed & Klein, 1985), and the first trait stereotypes children learn associate men with power and women with being fearful and helpless (Ruble &Martin, 1998). Furthermore, children as well as adults associate masculine traits with being more adult-like and feminine traits with being childish (Powlishta, 2000).

However, such strong in-group bias expressed by children may, to some degree, hinder the measurement of personality stereotypes (see Ch 2, p. 57 for further discussion). Powlishta (1995) asked eight to 10 year olds to rate personality characteristics as masculine or feminine and as positive or negative. She found that both boys and girls assigned more positive traits to their own sex with little consideration for traditional sex stereotypes. For example, girls argued that ‘strong’ is a feminine quality while boys labelled ‘gentle’ as a masculine quality. Basically, Powlishta argued, the need to evaluate one’s own sex more positively than the other overrode the sex stereotype knowledge so that the best predictor of whether a trait was claimed for own sex was its perceived positivity.

In spite of the overall ingroup bias effect, Powlishta (1995) found that there were some traits that boys and girls agreed to be masculine or feminine regardless of their perceived positivity. These exceptions were suggestive of perceptions of men's greater power and women's timidity as 'crude, 'loud' and 'fights' were agreed to be masculine, while 'shy', 'steady', 'dependent' and 'sorry for self' were categorised as feminine. Overall, the personality stereotypes of women have been found to be significantly more favourable than stereotypes about men (Eagly & Mladinic, 1993; Fiske, Cuddy, Glick & Xu, 2002; Glick et al., 2004). The explanation for this is based on men being attributed negative (e.g. arrogant, dictatorial and bossy) as well as positive traits associated with power. Women on contrary are associated with lower power but highly likeable traits such as sensitivity and nurturance (Glick & Hilt, 2000).

The fact that men are evaluated less favourably than women in both implicit and explicit measures is yet more significant as among other types of groups that can be described as high vs. low status, the higher status groups are typically described more positively (Glick et al., 2004). Fiske et al. (2002; Fiske & Cuddy, 2006) argued that unlike many other group stereotypes, gender stereotypes do not run along the positive versus negative continuum, but are rather structured along agency and communion dimensions. These dimensions are comparable to instrumentality versus expressiveness dimensions discussed by Spence and colleagues (e.g. 1978).

Some researchers have argued that as personality stereotypes reflect observations of men and women in social roles, these stereotypes should have changed as the distribution of the two sexes into social roles has changed (Spence & Buckner, 2000). Basically, if men and women are believed to occupy increasingly similar roles, the characteristics of women and men should also be perceived as increasingly similar. As the increasingly similar roles are mostly due to women entering male roles, female personality stereotypes should have changed to incorporate more career-related qualities. As Eagly and Steffen (1984, 1986) showed, these attributes are more instrumental (e.g., competitive, individualistic) than those identified with the domestic role. As the roles of men have changed much less than those of women, it could be assumed that the personality stereotypes of women have changed more than those of men.

Diekman and Eagly (2000) found that stereotypes about women are rather dynamic, whereas stereotypes about men portray them as relatively unchanging. In other words, stereotypes about women have changed more than have stereotypes of men, and are likely to keep changing more rapidly in the future too. Specifically, Diekman and Eagly (2000) argued that people believe that women of the present are more masculine than are women of the past, and that women of the future will be more masculine than women of the present, particularly in regards to personality characteristics.

Academic and educational gender stereotypes

Historically, education and training have prepared men and women for different societal roles after schooling. In the UK, until the Sex Discrimination

Act (SDA) became a law in 1975, it was lawful and normative to teach different subjects to girls and boys. Girls were taught to clean, cook and perform caring roles, while boys learned metalwork, woodwork and technical skills that would abet them in their future roles as providers. However, steady progress has been made since 1975 and one of the most significant developments in recent years is girls' continuously improving results across the curriculum.

In the UK, as well as in Finland and most other Western cultures, girls are currently outperforming boys at school overall and in all subjects including traditionally male ones such as physics, maths, computer studies and design technology (BBC, 2006). Based on such results girls seem to be equally able, even if not always willing, to study these subjects. However, Bandura, Barbaranelli, Caprara and Pastorelli (2001) found that these concrete performance results have not changed children's perceptions about their own abilities in different subjects. Their findings showed that the differences in efficacy beliefs follow the stereotypic course, as boys judge themselves more efficacious at science and technology while girls report higher sense of efficacy at social, educational, and health related subjects.

Despite educational intervention efforts, sex differences in young men's and women's perceptions of academic competence and preference, specific course enrolments and future occupational choices persist (Eccles, 1987; Eccles & Harold, 1992). Thus, young females' early self-perceptions of low competence in math and science often result in actual gender gaps in math and science occupations (e.g., Benbow, 1988; Benbow & Minor, 1986; Eccles, 1992, 1994; Eccles et al., 1999; Hannover & Kessels, 2004). Overall it seems justifiable to conclude that children and adolescents' stereotypical self-perceptions and affective reactions regarding their competencies and chances for success in given domains are influential factors affecting their educational choices, future aspirations and occupational destinies (Eccles, Jacobs, & Harold , 1990; Hannover & Kessels, 2004; Eccles, Barber & Jozefowicz 1999).

Occupational gender stereotypes

Gender stereotypes portraying boys and men as strong, independent and brave as well as undemonstrative and rational ultimately also describe them best suited for leadership, decision making and to jobs requiring bravery or physical strength. In the same mode, women who are by popular stereotypes deemed gentle and linguistically able yet physically feeble are destined to occupy roles that require caring qualities and good communication skills but not too much independence or ambition.

These gender stereotypes have led to occupations being clearly categorised into male and female jobs. This clear typology has guided generations of boys and girls to near-exclusively dream about and pursue occupations suitable for their sex. Although some of the occupational sex stereotypes have changed with times (e.g. vet, doctor, lawyer), occupational sex segregation still prevails (Millward, Houston, Brown & Barrett, 2006). In turn, occupational gender segregation is strongly linked with skills shortage in many gender-typed occupations (e.g. plumber, electrician, nurse and childminder) in several western countries (Millward et al., 2006; Thewlis, Miller & Neathey, 2004). Gender segregation is also a major cause behind gender pay gap and women's overall inferior position in the labour market (Annual Survey of Hours and Earnings, 2005). Some organisations, such as Equal Opportunities Commission in the UK, have designed campaigns to encourage children and adolescents to change their views and demolish the old stereotypes but so far not much progress has been made. The unsuccessful campaigns are consistent with the findings of psychological studies (e.g. Hughes & Seta, 2003) that have repeatedly demonstrated that once formed and accepted, gender stereotypes are very resilient to change.

Three theories of children's sex-role development have been used to explain the gender stereotypes in occupational attitudes and aspirations (Helwig, 1998). Two of these, Kohlberg's Cognitive Theory (1966) and Bandura's Social Learning Theory (1986) are more general theories of gender role development while the third, Gottfredson's theory of circumscription and compromise (1981), is a more specific approach that focuses only on children's occupational attitudes and aspirations. As the former two are further discussed elsewhere (Ch. 2), this chapter will only highlight those parts of these theories that are directly linked to occupational aspirations and stereotypes.

The underlying assumption of Kohlberg's developmental theory is that children become increasingly flexible in their views after they have reached gender consistency at approximately seven years of age. In their examination of occupational gender-role stereotypes, O'Keefe and Hyde (1983) found limited support for Kohlberg's theory in that younger children did indeed show more stereotyping than older. However, in a response to a personal aspiration question both girls and boys of all ages provided very stereotypical answers thus contradicting Kohlberg's hypothesis. These results indicate that although children get more flexible and accepting towards other people's gender-inconsistent behaviour, their personal choices and aspirations remain gender stereotypical more often than not. More recent research on children's occupational aspirations has not included references to Kohlberg's theory.

According to Social Learning Theory (Bandura, 1986) children are taught to do 'boy or girl things', to pursue appropriate academic subjects and to aspire to occupations that fit the traditional gender stereotypes (Sigelman & Shaffer, 1995). Parents and other important others may do this unconsciously, through differential reinforcement and subtle signs of approval versus disapproval. Also, many researchers, for example Franken (1983) and Reid (1995), have argued that observational learning through imitation and modelling explain why children tend to choose gender-stereotypical occupations. Franken (1983) found that gender-role stereotyping was greater among younger ages and more common for boys than girls.

Based on an extensive literature review, Stockard and McGee (1990) concluded that learning the gender-type of occupations was pre-eminent over other job characteristics such as pay or prestige when children were asked to select their preferred occupation. However, it needs to be noted that most of the research applying the social learning theory to occupational aspirations and attitudes dates from the 1980s and the early 1990s, and may hence not be applicable to current society where attitudes toward gender stereotypes and family roles have markedly changed.

Gottfredson's theory of circumscription and compromise has been supported by a number of studies (e.g. Miller & Stanford, 1987; Stockard &

McGee, 1990). Circumscription of occupational aspirations refers to one's perception of the gender-type of job, prestige level of a job and the amount of effort necessary to attain an occupation. Compromise signifies job accessibility and the need to adjust the implementation of one's occupational aspirations (Gottfredson, 1981). Gottfredson identified four developmental stages children go through in their career development.

In the first stage, at about age three to five, children are orientated toward size and power, both qualities they perceive themselves to lack. Typically, children of this age want to become police officers, lorry drivers, princesses or teachers. In the second stage the focus is on orientation to sex roles. Children in the age range from six to eight associate gender with occupations and typically pick an occupation 'suitable' for own sex when asked to nominate a favourite. Typical responses include technician and mechanic for boys; nurse and hairdresser for girls.

Stage three children's, typically between nine and 13 years of age, orientation is to social values and differences in abilities and skills. Children become more aware of occupational status and social prestige and foreclose some occupations based on these. Also, children tend to pick occupations at their own level of social status. During the third stage, children realise that intellectual requirements and demands of some occupations may be greater than they are able or willing to provide.

Gottfredson argues that at the fourth and final stage of career development, at ages 14 and older, individuals choose occupations that reflect their internal, unique selves. At this stage, interests and personality factors guide adolescents in their occupational selection. Basically, Gottfredson (1981; 1996) believes that process of career development can be characterised as the development of a range of acceptable occupations through the circumscription and compromise processes, which are guided primarily by perception of gender, social values and efficacy beliefs, as well as by unique internal traits.

Henderson, Hesketh and Tuffin (1988) tested Gottfredson's stages two and three, and found that gender typing of occupations occurred less in girls than in boys, and even at a younger age than suggested by Gottfredson. They also found that social value of occupations influenced the vocational preference of older children, as predicted by Gottfredson, but only in a free-response task. Trice, Hughes, Odom, Woods and McClellan (1995) found that as Gottfredson predicted, children rejected more occupations from the given list as they got older, hence implying higher levels of circumscription. Furthermore, girls have been found to explore careers from a narrower set of options than boys (Farmer, 1995), which indicates that they view their occupational choices as more limited than do boys.

Developmental trends in gender stereotyping and gendered attitudes

The effect of age has been extensively studied in relation to racial stereotyping and prejudice. However, the effects of age on gender stereotyping have not been focus of such attention. In general it is accepted that as sex is such a prevalent category, and as children tend to self-categorise themselves according to their sex prior to any other categorisations, the developmental trends in sex stereotyping and sex-based prejudice do not follow the same developmental pattern than, for example, racial attitudes (Powlishta, 1995). Sex-based categorisation is extremely prevalent during childhood (Bigler, Jones & Lobliner, 1997; Serbin, Powlishta, & Gulko, 1993) and occurs at much earlier age than other more abstract forms of social categorisation such as those based on nationality (Rutland, 1999).

Powlishta (2002) argues that children's knowledge of personality stereotypes lags behind their knowledge of stereotypes connected to objects and activities as these are more concrete. However, even three year old children show some awareness of gendered personality stereotypes (Albert & Porter, 1983; Cowan &Hoffman, 1986; Etaugh & Riley, 1983). Adult-like levels of knowledge are shown by late childhood, with substantial increase occurring between the ages of five and 11 (Beere, 1990; Williams & Best, 1982; Serbin et al., 1993; Williams, Bennett & Best, 1975).

Katz (1996) found that gender-related self-flexibility and tolerance for others engaged in gender-atraditional behaviour increased with age from middle childhood through adolescence. Very young preschool children express more flexibility prior to stereotype acquisition, which decreases as stereotype information is learned and increases again in the mid-childhood. Katz's findings suggest that increase in flexibility continues, with little evidence of curvilinear relationship, which Aboud (1988) argues characterises age effects on racial stereotyping. Furthermore, Liben and Bigler (2002) demonstrated that gender-related attitudes become more egalitarian with age, and similarly to other theorists attributed this to greater cognitive maturity and experience that allows for such flexibility.

Liben and Bigler (2002) found children to express more stereotyped attitudes than adults. In contrast to this finding, Powlishta (2000) found that adults rated others more stereotypically on feminine traits than did children. Powlishta (2000) however postulated that adults may be more aware that males and females can possess similar characteristics, but that this flexibility of attitudes does not translate into perceptions of individuals. In other words, adults can be less willing than children to express stereotypes about men or women as *a group*, but to still evaluate *individual* men and women along the gender-stereotypical lines.

The notion of sex stereotyping and rigidity of sex roles decreasing with age is also supported by both cognitive-developmental (e.g. Kohlberg, 1966) and social role (Eagly, 1987) theories. The former assigns the age effect to lack of cognitive resources available for young children, while the latter argues younger children to feel more strongly about their role as a boy or a girl due to lack of competing roles such as being a mother, a conservative or a Londoner.

Francis (1998) found that younger children are more likely than older to view genders stereotypically. However, Francis (1998) challenges the idea that younger children are less egalitarian simply because of their developmental stage. In line with Social Role Theory's supposition, she argues that they invest more in 'gender category maintenance' but as they become older and more confident, the need to do this is reduced. Apart from being less prone to self-stereotyping, adolescents have also been found to perceive their environment as more flexible than younger children. This is a finding opposite to that advanced by theorists espousing gender-intensification effects in adolescence (Hill & Lynch, 1983). Furthermore, methodological issues can also have an effect on stereotyping as it has been shown that stereotyping increases with age on forced-choice measures (Signorella et al., 1993), while opposite age effect is reported on open-ended questions (Kohlberg & Ullian, 1974).

Signorella and Liben (1985) emphasise the importance of separating the concept of knowing about gender stereotypes from the endorsement of gender stereotypes as these two are affected by age in a different way. The first concept concerns children's understanding of which activities and behaviours people in a society assign to either women or men (Signorella & Liben, 1985). Knowledge of gender stereotypes is expected to increase with age, as children's abilities across a wide variety of cognitive and social domains increase. Importantly, the second concept concerns the degree to which children agree with the societal gender stereotypes. Developing individuals are increasingly able to appreciate a range of perspectives and are able to think hypothetically. These abilities allow adolescents to be more flexible about gender stereotypes and hence also allow them to disagree with the stereotypes they realise others to endorse (Signorella & Liben, 1985).

Sex differences in gender stereotyping

The majority of studies into gender differences in stereotyping have found that girls are more egalitarian and endorse gender stereotypes less strongly than boys (e.g. Liben & Bigler, 2002). Similarly, adult men frequently report more stereotyped attitudes than women (E.g. Glick & Hilt, 2000). This sex difference has been attributed to overall power differences in society as women and girls, who find themselves in a subordinate position in comparison to men, are more eager to aspire towards societal change and greater equality between the sexes (Glick & Hilt, 2000). Boys and men on the other hand find themselves in a superior position and are hence less inclined to want a change towards greater egalitarianism (Glick & Hilt, 2000). For them, endorsing traditional gender stereotypes serves as a tool of justification for the existing power differential.

Egan and Perry (2001) found that boys had higher scores than girls on gender typicality, gender contentedness and felt more pressure to conform to gender expectations. Their results were in line with others that have shown boys to be more sex typed and to experience more pressures for sex typing than girls (Huston, 1983; Ruble & Martin, 1998). Egan and Perry (2001) also found girls to be more flexible than boys in their self-preferences and their attitudes towards others. Cognitive-developmental or other theorists examining the development of gender stereotyping in children have not considered gender differences but the results obtained in numerous studies consistently point towards boys being more stereotypical in their attitudes than girls (Glick & Hilt, 2000; Huston, 1985; Signorella et al., 1993).

Predictors of stereotyping: Parental influence

Research has found substantial intergenerational resemblance in gender-role attitudes (Fan & Marini, 2000; Shebloski & Gibbons, 1998). This means that adolescents and young adults resemble their parents in their gender-related views much more than could be expected by chance (Antill, Cunningham & Cotton, 2003). Antill et al. (2003) found that performance of feminine household tasks (laundry, cleaning, cooking etc.) clearly distinguished egalitarian families from others, and more specifically showed that the less mothers did these chores, the more egalitarian their daughters were.

Furthermore, Antill et al. (2003) argued that for girls, gender-related attitudes are a subject to a range of influences while boys do little more than mirror their parents' attitudes. The results of Thorn and Gilbert's (1998) study provided support for the hypothesis that modelling of non-traditional behaviour by parents influences the development of son's attitudes and expectations of a more equal marital relationship. More specifically, Thorn and Gilbert (1998) found that a father sharing housework with their wife was associated with increased role sharing expectations in sons. Similar results were obtained more recently by Millward et al. (2006).

In general, it has been found that families in which both parents have full-time careers differ on the gender ideology dimension from those with more traditional family structures (where mother doesn't work or works for the extra income only). Higher level of education, which is typical of dual-career families, is also associated with more egalitarian or role sharing attitudes in children. Furthermore, children whose mothers are employed are exposed to an egalitarian female role model at least in regards to labour market. However, the working mothers are likely to set an egalitarian example only in regards to labour-force participation as it has been shown that most working mothers continue to perform most, if not all, domestic work at home (Houston & Marks, 2003).

Employed mothers have been found to have more egalitarian attitudes than those who do not work, and are hence likely to transfer egalitarian views to their children too (Mason & Lu, 1988; Glass, 1992). Mother's employment has been shown to affect the gender attitudes of daughters more consistently than it has been shown to affect the attitudes of sons (Blee & Tickamyer, 1995). Furthermore, Moen, Erickson and Dempster-McClain (1997) found that mother-daughter congruence was greater for gender roles than for work roles. Moen et al. (1997) suggested that this is due to daughters' own life experiences having a stronger effect on work role identity, while the generalised beliefs may be more influenced by mother's views that start being transferred in early childhood.

Fan and Marini's (2000) longitudinal study enforced the findings of previous research as they too found that young women have more egalitarian attitudes than young men but that attitudes of both men and women were influenced in similar ways by family characteristics. Consistent with previous research, they found that highly educated parents and employed mothers were the strongest predictors of egalitarian attitudes. Fan and Marini (2000) concluded that the education of parents and mothers' employment, both of which have increased in recent decades, are important sources of societal change in gender-role attitudes, shifting attitudes in a more egalitarian direction.

Fan and Marini (2000) also that found gender-role attitudes are considerably stable through lifespan with some significant changes occurring during the transition to adulthood. They found that young men's attitudes changed (towards greater equality) more than young women's, and hence there was a decrease in gender differences as the sample got older. Fan and

Marini attributed the considerable stability of attitudes to the tendency of individuals to seek out new experiences on the basis of attitudes already held.

In general, demographic influences have been found to be strong predictors of children's gender-related attitudes, especially for girls. Antill et al. (2003) found that age, socio-economic status and parental attitudes (e.g. religiosity and political alliance) predicted girls' attitudes beyond parents' direct and indirect socialisation and parents' own gender-related attitudes. Antill et al. (2003) concluded that the ideologies and principles parents hold before the birth of children determine the home environment, which will perpetuate parents' values to their children more strongly than do their actual efforts to socialize their children into gender roles they deem appropriate.

Ambivalent Sexism

"Women are the only exploited group in history to have been idealized into powerlessness." - Erica Jong

During the past few decades the equation of gender prejudice with antipathy has been reassessed. Eagly and Mladinic (1993) showed that stereotypes and evaluations of women tend to be more favourable than those of men, and that this is the case even among those people who believe in traditional gender roles. Glick and Fiske (1996) introduced the idea of ambivalent sexism in order to re-examine the view that prejudice equates antipathy. In line with the feminist and family analyst Erica Jong's quotation above, Glick and Fiske (1996) argued that subjectively positive attitudes about women serve to justify and maintain women's subordination. For instance, the subjectively favourable image of women as loving compassionate carers can be used to justify confining women to lesser roles in society and bounding them to housework, childcare and low wages. Glick and Fiske (1996) presented The Ambivalent Sexism Inventory (ASI) as an instrument to gauge ambivalent sexism.

The scale measures two separate but related tendencies 'Hostile sexism', which involves negative feelings toward women and 'Benevolent sexism', which reflect a paternalistic mode of group relations where women are idealised as objects of men's affections and viewed as lovely but fragile creatures who need men's protection. Such a paternalistic manner of thinking requires women to fit into a traditional female role, which can vary from timid daughter to sexy girlfriend to loving mother. Glick & Fiske (1996) further proposed that both hostile and benevolent items reflect three separate dimensions: gender differentiation, power and heterosexuality.

Within the hostile attitudes the three dimensions are reflected in both sexes' attempts to positively differentiate their own sex from the other (gender differentiation); in men's desire to maintain power (power differentiation); and in male perception of females as sexual objects (heterosexuality). Benevolent attitudes reflect the same three dimensions in that benevolent gender differentiation includes favourable stereotypes about the other sex; the power dimension comprises of men's protective paternalism towards women; and benevolent beliefs about heterosexuality emphasise the notion of men and women as two halves of a whole, both of whom need each other in order to be complete (Glick & Hilt, 2000).

Higher ASI scores are related to greater degrees of sexism. For example, people with high levels of hostile sexism are more likely than others to hold negative stereotypes about career women, and to express attitudes that are more tolerant of sexual harassment and spousal abuse of women (Glick & Fiske, 1996). In contrast, high scores on benevolent sexism are not related to overt measures of hostility toward women. Nevertheless, benevolent sexism can turn ugly when women venture beyond traditional gender roles. For instance, studies have found that benevolent sexists were more likely than others to blame a female victim for being raped after she invited a man into her apartment (Glick & Fiske, 1996).

In all countries where ambivalent sexism research has been carried out thus far men have scored higher than women on hostile sexism. In contrast, when it comes to benevolent sexism the gender gap is often small or nonexistent. In fact, in the most sexist countries women endorse benevolent sexism to an even greater degree than men (Glick et al., 2000). The hostile reactions encountered when protesting the traditional roles may make these women to embrace benevolent sexism and the protection it promises (Glick et al., 2000).

In 1996, Glick and Fiske extended their model to encompass women's ambivalent attitudes towards men. They argue that women's conventional prejudice towards men represents an attempt to gain positive differentiation to their group within a system where women have a lesser status and less power than men (Glick & Hilt, 2000). This prejudice is not paternalistic but is born out of jealousy of men's power and control. The ambivalence of this prejudice lies in the underlying respect accorded to men that accompanies resentment of men's status.

Glick and Fiske do not equate women's aspiration towards greater egalitarianism to ambivalent sexism or prejudice, but argue that it is the attitudes that presume men to be incompetent in the domestic arena, those that view men instrumentally (i.e. solely as providers), and those that emphasise women's control over men in romantic relationships that form ambivalence towards men. Glick and Fiske maintain that women's ambivalent prejudice towards men does nothing but perpetuate the social system where men maintain structural power as women seek power in domains where men are dependent on them (i.e. domestic sphere and sexual relationships). As women seek power in these areas, they cede the powerful roles outside the home to men (Glick & Hilt, 2000). The scale used to measure these attitudes, Ambivalence towards Men Inventory (AMI), comprises of both benevolent and hostile items, and reflects the same three dimensions as do the subscales of the ASI[2].

Development of ambivalent sexism in children

Originally the ambivalent sexism model was constructed with adult gender relations in mind, but Glick and Hilt (2000) applied the model to children's gender-role development. They argued that past research and theory has failed to capture a vital developmental shift from a wholly hostile and cognitively simple gender prejudice to a volatile, multifaceted and ambivalent form of prejudice that begins to emerge in early puberty.

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[2] The subscales of the ASI are called Hostile Sexism (HS) and Benevolent Sexism (BS), while the subscales of the AMI are called Hostility towards Men (HM) and Benevolence towards Men (BM). This asymmetry is due to the ASI being constructed first before the further development of the theory that yielded the AMI (Glick, Fiske et al., 2004). If the two scales had been developed simultaneously, the subscales of ASI would have been called Hostility towards Women and Benevolence towards Women.

Glick and Hilt (2000) assert that young children's attitudes towards the other sex fit well into the social psychological model of hostile intergroup relations. However, they argue that during puberty, dependencies develop between the sexes due to the development of romantic sexual attraction, and that these dependencies foster a benevolent form of prejudice. As a result, the benevolent attitudes may coexist with hostile attitudes, creating ambivalent attitudes and polarized behaviour in cross-sex interactions. The transition from childhood hostility to adolescent ambivalence is driven by the realisation of sexual interdependence, which fuels a benevolent form of sexism (Glick & Hilt, 2000).

The dimensions of the ambivalent sexism model that are most relevant to pre-pubertal children are the hostile aspects of gender differentiation and power differences (Glick & Hilt, 2000). Gender relations are predominantly hostile because the dependence between the sexes introduced by romantic relationships is completely lacking. As Fiske and Hilt (1998, p. 13) point out, "the overwhelming finding of developmental research is that sex segregation and antipathy towards the other sex are powerful, cross-cultural phenomena that resists all egalitarian-minded interventions by adults" (e.g. Bukowski, Gauze, Hoza, & Newcombe, 1993; Powlishta, Serbin, Doyle, & White, 1994; Yee & Brown, 1994). The negativity towards the other sex begins as soon as children can accurately identify their own sex, and develops into hostile form of competitive gender differentiation by the age of five (Glick & Hilt, 2000, p. 13).

However, around the twelfth birthday, a realisation of interdependence begins to change the relationship between pre-pubescent boys and girls as attraction to one another can no longer be denied (Glick & Hilt, 2000). Glick and Hilt (2000) suggest that the hostile prejudice of childhood doesn't disappear overnight, but becomes melded with new intergroup attitudes promoting some degree of benevolence. Despite hostile and benevolent attitudes being in conflict with each other, these attitudes have been found to be positively correlated among adolescents (Glick & Fiske, 1996). And as benevolently sexist attitudes are often deemed as more socially desirable than hostile attitudes, they may serve to establish traditional gender roles more effectively than do their hostile counterparts (Glick & Hilt, 2000).

Glick and Fiske (1998) argue then that the emerging interdependence creates benevolent attitudes on the part of boys towards girls. They further argue that this benevolence coexists with hostile, competitive attitudes but that this benevolence is not reciprocated by girls towards boys, possibly because of their lesser power in cross-sex relationships. The power differential is, according to Glick and Fiske (1998), due to the different interaction styles acquired during early childhood when boys develop more direct, high-power style, while girls' style is more indirect and polite. Glick and Fiske (1998) maintain that although the changes during adolescence increase complexity of gender-related attitudes, they do not necessarily result in decrease of gender prejudice but merely change how prejudice is manifested.

Conclusions

Based on biological sex, people are divided into males and females. Biological sex becomes gender as a given culture attaches attributes, behaviours, personality characteristics and expectancies to male and female labels. The all-encompassing and continuous nature of being either a male or a female makes gender arguably the most important social category people belong to during their lives. As all social categories have stereotypes attached to them, an enormously prominent category such as being a male or a female is associated with a large number of stereotypes that are very resistant to change, and do not evolve at the same pace than the *actual* roles of males and females .

As this chapter has demonstrated, gender stereotypes have been widely researched. The most prominent findings have shown gender stereotypes to be strongly influential in children's development partly because they seem to be very resistant to change even in the face of disconfirming evidence. They impact children's educational and occupational aspirations and hence directly the wider societal issues of gender pay gap, occupational gender segregation, and skills shortages. The development of gender attitudes is affected by both gender and age, but the research findings on these effects remain somewhat irresolute.

The empirical chapters of this thesis will attempt to shed some more light on the effects age and sex have on gender attitudes, as well as examining the differences in these attitudes in two European cultures that share basic values about equality and individual freedom but differ in history, social structure and social policy. However, before the empirical chapters, the next chapter will examine more closely *how* children acquire their understanding of sex, and of being either a boy or a girl. After all, the gender stereotypes discussed in this chapter only become relevant once children understand that they belong to one of the two categories to which these stereotypes are attached.

Chapter 2: Theories of Gender Identity and Gender Role Development in Children

This chapter will outline theories that have discussed how and when children acquire gender identity and how they come to understand the roles attached to being either a male or a female. Gender Socialization Theories (Mischel, 1966), Gender Relational Theories (Davies, 1989), Cognitive-based Theories (Kohlberg, 1966) and Social Role Theory (Eagly, 1987) are outlined together with key research that has been carried out in support of each of these theories. The influence that inter-group processes may have on children's gender-related development is also discussed as these processes can be of crucial importance (Powlishta, 2002), and also as the established theories on children's gender development have rarely considered these processes as important factors.

Children's Gender Role Acquisition

A few commonly accepted theoretical assumptions underpinned research on children's gender role acquisition, thus hindering the progress of this research area until the early 1980s (Katz & Ksansnak, 1994). Firstly, it was assumed that gender role acquisition was largely completed before children entered school, and hence most research was carried out on preschool children. The second assumption was that parents were the primary source of gender role attitudes, and that little else had significant influence on the development of these attitudes in children. Thirdly it was supposed that the acquisition of traditional sex-roles and related behaviours was normative and desirable, and that any deviant development (e.g. a girl wanting to play with trucks or a boy being interested in cooking) was to be discouraged.

Since the 1980s theories on the development of sex roles have included the assumption that the development of gender roles is a process that continues into adulthood (e.g. Condry, 1984; Katz & Ksansnak, 1994). This development has brought about a change in research focus. Also, the influence of other socialising agents, besides parents, has been recognised and extensively studied (e.g. Huston, 1985; Liben & Signorella, 1987). Because children's sex-role acquisition has been found to be more variable between individuals than previously assumed, research has increasingly focussed on individual differences in the acquisition of these roles. Furthermore, from the 1980s onwards it has been noted that departures from traditional sex role behaviours and attitudes are more often than not associated with positive outcomes (Hemmer & Kleiber, 1981; Silvern & Katz, 1986). For example, girls fascinated by maths are now pushed to pursue their interest, and kind-heartedness in boys is more often than not encouraged by parents.

Like numerous other issues in psychology, the development of sex-roles and gender identity can be subjected to the 'nature-nurture' debate. As is the case with other questions under such scrutiny, developments in our understanding of human learning processes indicate that asking whether gender differences are caused by nature or nurture is unhelpful as it is near impossible to disentangle the two (Halpern, 1992; Head, 1999). Paechter (1998) argued that the recent development in neuroscience suggests that certain parts of the brain are strengthened as a result of experience, and that different experiences can lead to different developments in the brain. Paechter (1998, p.46) continued to argue that sex differences in brain structure could develop because boys and girls "do experience the world in different ways, both because of their different bodies and because they are differently positioned in society".

Gender Socialization Theories

A starting point for the theoretical work concerning the development of gender and sex-roles were the theories that can be grouped under the umbrella of socialisation theories. These theories argue that gender-typed behaviour, like all other behaviour, is shaped by environmental contingencies such as reinforcement and observational learning (Mischel, 1966). Historically, social learning approach can be rooted back to Freud who argued that children learn their gender roles through identification with the same sex parent and through the successful resolution of either Oedipus or Electra complex. During these complexes, Freud believed children to feel resentful towards their own sex parent because they fall in love with the parent of the opposite sex.

Sears, Maccoby and Levin (1957) reworked Freud's ideas and argued that children's sex-role identification took place through modelling and reinforcement based on the optimal familial roles where mothers provide warmth and emotional support while fathers provide discipline and control. An update by Mischel (1966) emphasised the importance of situational variables in determining the meaning of specific activities for each sex, and argued that the child's social learning history could be expected to affect cognition and attitudes as well. Thus, both external and internal processes were seen as contributors to sex-role acquisition.

The idea of interplay between external and internal processes was further enforced by Cognitive Social Learning Theory (Bandura, 1986), which emphasised the role of cognitive factors such as expectancies about behavioural consequences in mediating between situations and gender-typed behaviour. Maccoby and Jacklin (1974) caused controversy among social learning theorists as their review of existing literature concluded that families actually treat girls and boys very similarly. This conclusion was widely noted and later supported by meta-analysis conducted by Lytton and Romney (1991).

These conclusions resulted in a decline of socialisation research and an increased interest in children's self-socialisation through cognitive processes (Fagot, Rodgers & Leinbach, 2000). However, persistent disbelief has been expressed towards the argument that parents treat children of different sexes near identically as this is in conflict with everyday examples of the two sexes being treated differently (e.g. dressing baby girls in pink and telling little boys to toughen up).

The cognitive theories claiming that children understand about the two sexes only after the stage of concrete operations[3] has been reached at around seven years of age were discredited when empirical studies found that sex-typed behaviour is found before the age of two and that stereotyping behaviour is already evident between the ages three and six (Fagot et al., 2000). These results reawakened interest in the socialisation processes, and the influence of parents and peers on gender role development. However, the revised social learning theory does not treat a child as a passive recipient of parental, familial or societal influences, but recognises the child's capabilities and cognitive processes as equally important for the development of a gender-typed individual.

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[3] The concrete operational stage is one of four main stages within Piaget's model for cognitive development. According to Piaget (1896-1980) this stage begins at approximately age 7 and is normally completed by age 11. The stage is characterized by the ability to perform simple logical operations and understand conservation. For example, children at this stage will know that if water from a full cup is transferred to another receptacle it will retain the same quantity no matter what shape it is rearranged in.

The strength of gender-role socialisation processes has been supported by studies that have shown parents of newborn babies to perceive their sons and daughters differently. Rubin, Provenzano and Luria (1974) found that even though babies did not differ in birth length, weight or Apgar scores, fathers of girls were more likely to describe their babies as softer, finer-featured, weaker and more delicate than fathers of boys who rated their babies as firmer, better coordinated, stronger and heavier. However, such perceptions and divergences in the treatment of boys and girls may be affected by current transformations in organisation of families, as the traditional role division of mothers providing warmth and fathers discipline is no longer taken for granted. Fathers' roles in their children's upbringing has drastically changed during the past two decades and they are now more involved in their children's lives than ever before (Kaufman & Uhlenberg, 2000).

The practical implications of socialisation theories, such as social learning and cognitive development, offer clear possibilities for policymakers and others striving to change or reduce the current stereotypes. In contrast, theories emphasising biological bases of gender-roles offer little hope for such attempts. As Skelton and Hall (2001) point out, by maintaining the idea that gender identities are, at least partly, the result of childhood socialisation, media representations, and family or peer expectations, the alternatives for shifting children's perceptions about themselves and others are boundless.

Gender Relational Theories

The modified social learning theory is close to a group of theories named Gender Relational Theories, which postulate firstly that children develop their gender identity actively by striving towards being a proper girl or boy, and secondly that situational factors are crucial in the development of gender roles (Skelton & Hall, 2001). Gender Relational theories (e.g. Davies, 1989; Francis, 1998) see gender as a fluid concept and argue against adopting a generalising approach whereby all boys are deemed boisterous and all girls cooperative.

The theory posits that although children are aware of their biological sex from a very early age, the 'trying out' of the language, attitudes and behaviours associated with being a girl or boy is a longer process. Similarly, the behavioural and personality expectations may vary from home to home, from school to school and from peer group to peer group. As Jones (1993) pointed out, one family may place value on a boy being tough, strong and manly so that an emotional introverted boy is seen as a failure or disappointment. Another family however may hold contrasting view of an ideal boy whereby a similar quiet, emotional and sensitive boy is deemed to be exactly as a little man should be.

Cognitive-based theories

Cognitive-development theorists, such as Kohlberg (1966), suggest that a child's understanding of gender identity as opposed to biological sex depends on their stage of cognitive development, i.e. intellectual age. Kohlberg (1966) argued that the development of gender is not solely a response to praise and punishment but instead relates to Piaget's developmental stages[4]. So for example, in the same way as a child may believe that a piece of modelling clay changes weight as it changes shape, they also believe that a boy wearing a long wig and a dress is suddenly a girl. According to the cognitive-developmental theory sexism and gender stereotyping in children peaks at around five to six years of age when their cognitive abilities are too limited to accept any flexibility in gender roles, which they nonetheless have been old enough to acquire from their environment (Sayers, 1984).

Gender schema theory is one of the theoretical models that encompasses aspects of both branches of socialization hypothesis, social-learning theories and cognitive-developmental theories, and has guided gender role development research by focusing on children's knowledge about gender (Martin, 1989, 1991, 1993; Martin & Halverson, 1981, 1987). Gender schema theory was originally developed by Bem (1981), who argued that gender schemas develop from children's basic tendency to classify and simplify information from their environment. In cognitive psychology, 'schema' refers to a cognitive structure that has been developed from prior learning and is applied to new information that requires understanding and internalisation.

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[4] Sensorimotor stage (years 0-2), Preoperational stage (years 2-7), Concrete operational stage (years 7-11), Formal operational stage (years 11-adulthood)

Bem (1981) applied this approach to understanding the development of gender stereotyping and argued that as gender is highly salient in human societies, children recognise its functional significance and use it for purposes of categorisation, inference and the self-regulation of behaviour. Accordingly, a gender schema is a person's overall scaffold about gender that helps with information processing and organising. Martin (2000) extended the theory by differentiating between two types of gender schema: The superordinate schema is a list like structure that contains information about the sexes, while the own-sex schema is a more in depth structure that contains detailed plans of action for carrying out gender-typed behaviour.

Children form a gender schema gradually as they learn the network of associations that are gender specific in their culture. Gender schema becomes a part of children's self-concept as they strive toward being a 'good girl' or a 'good boy' by engaging in the gender-appropriate behaviours specified by the cultural gender schemas (Hide & Durik, 2001). Albeit formulating gender schemas at an early age a massive increase in knowledge about gender appropriate behaviour occurs during children's time in preschool and during early school years (Owen Blakemore, 2003). This is a result of teaching practises that frequently emphasise sex differences (e.g. girls are quiet and boys noisy) and use sex as a tool of categorisation (e.g. girls stand in one line, boys in another). At school child also enters a peer group in which the socialisation according to sex, sex stereotyping and gender segregation are strongly endorsed. The knowledge about particular gender related items and behaviours, as well as the knowledge that sometimes it is possible to violate these norms, grows steadily and varies from norm to norm (Owen Blakemore, 2003).

Social Role Theory

Social Role Theory (SRT), proposed by Eagly (1987), is another influential explanation for why gender stereotypes exist and are conformed to. The theory originated as an endeavour to understand the causes of sex differences in social behaviour. Social role theory proposes that sex differences in human behaviour stem from the contrasting distributions of the sexes into social roles. These differing role assignments are described in terms of two social structural characteristics: sexual division of labour and gender hierarchy, both of which can be traced back to hunter-gatherer and patriarchal societies.

Also, the differing roles have different set of expectations and require different skills that are, at least to some extent, biologically determined. Women and men's different social roles give rise to the formation of gender roles that include shared expectations about how individuals of each sex typically behave. Gender-stereotypic expectations in turn produce sex differences in behaviour, mainly through processes of behavioural confirmation and gender-based self-regulation (Vogel, Wester, Heesacker & Madon, 2003).

Early functional theories that led way for the social role theory assumed that complementary male and female roles are a prerequisite of a smoothly operating society (Parsons & Bales, 1955). The proposed family and society role differentiation was based along instrumental and expressive lines in that men were assumed to specialise in behaviours related to task accomplishment and women in behaviours related to group maintenance and other social concerns (Strodtbeck & Mann, 1956). In the modern social role theory the concept of gender role is stripped from its functional roots as it is recognised that the construct of gender roles does not have to be complementary or have particular expressive or instrumental content (Eagly, Wood & Deakman, 2000). In line with Parsons and Bales' (1955) arguments, the theory however assumes that gender roles reflect a society's distribution of men and women into breadwinner and homemaker roles as well as into different types of occupations.

Social role theory treats gender roles as a dynamic aspect of culture that change in response to alterations of the typical work and family roles of the sexes. Accordingly, a number of studies have found an increasing disapproval of such divergent roles and responsibilities of men and women (Harris & Firestone, 1998; Loo & Thorpe, 1998; Sherman & Spence, 1997; Spence & Hahn, 1997) and a meta-analysis by Twenge (1997) showed a general shift towards more egalitarian definitions of women's rights and responsibilities between 1970 and 1995. These changes in attitudes have continuously been found to be larger among women than men, and to be overall very inconsistent across different cultures and even across different sectors of one society (Eagly et al., 2000).

According to social role theory, gender roles begin to be acquired early in childhood and are elaborated throughout childhood and adolescence. Gender roles are highly important for children due to lack of competing roles such as a parent, an employee or a spouse. This might explain children's tendency to have rather rigid ideas about gender and to show pronounced gender prejudice. For children and adolescents the understanding of gender roles and the consequences of gender conformity and deviation are crucial for learning to successfully negotiate their social environment. They learn that violating others' expectations about sex roles can bring about negative reactions, whereas meeting the sex specific expectations often results in rewards of social approval and cooperation. Also, living up to one's own personal expectations about gender-appropriate behaviour can yield rewards of self-esteem and confidence (Eagly et al., 2000).

In Eagly's (1987) theory, changes in attitudes are crucial. The division of labour between the sexes can change, but if gender-role expectations do not, then social behaviour and personality will not change either. There is considerable evidence that attitudes toward women working and gaining status have become considerably more liberal since the 1960s (Mason, Czajka, & Arber, 1976; Spence & Hahn, 1997; Thornton, Alwin, & Camburn, 1983; Twenge, 1997). This shift in attitudes is also likely to affect how parents raise their children. If parents expect their daughters to have careers when they are adults, they are likely to treat them differently and encourage different types of activities. This may be especially true during recent decades, because people believe that their children's future will be even more gender-egalitarian (Diekman & Eagly, 2000).

Thus parents' expectations shape their children's behaviour, creating the stereotypical or non-stereotypical personality and behaviour that they expect, almost like a self-fulfilling prophecy. A prime example of change is girls' participation in sports, which increased 800% between 1970s and 1990s

(Guttman, 1991). Several studies have found that sports participation is correlated with assertiveness and agentic traits (Butcher, 1989; Marsh & Jackson, 1986). Changing attitudes toward women's roles in society have led to shifts in girls' activities, and these activities can lead to personality changes.

Generic Intergroup Processes as Factors in Gender Development

Powlishta (2002) argued that generic intergroup processes may contribute to gender-role development as viewing females and males as 'us' versus 'them' will influence children's perceptions, beliefs, attitudes, and behaviour towards the two groups. Powlishta (2002) presents self-categorisation as the first prerequisite for intergroup processes contributing to gender-role development. Number of studies has shown that males and females are treated as different from each other by babies over six months old hence suggesting that elementary gender categories exist already among infants (Katz, 1996; Leinbach & Fagot, 1993).

Johnston, Madole, Bittinger and Smith (2001) showed that children begin to actively divide the world into males and females between 18 and 22 months of age, and are able to sort photographs on the basis of gender between two and three years of age (Katz, 1996; Levy, 1999). Gender labels are often used appropriately by two-year-olds and by three years of age children can consistently and correctly label both themselves and others (Katz, 1996; Levy, 1999).

The ubiquitous nature of gender as a social category throughout the childhood has been demonstrated by numerous studies using different types of categorisation (e.g. sorting photographs; paring people with activities;

similarity judgements) and memory (e.g. interference paradigm and 'who said what?' recall) tasks. Powlishta assumed the prevalence of gender to mean that the same intergroup processes seen in minimal group studies also influence children's perceptions, attitudes and behaviours regarding males and females (2003, p. 108). Indeed, it has been shown that children rate unknown people to be more similar to themselves when they are of the same sex (Brewer, Ho, Lee & Miller, 1987; Powlishta, 1995), and assume same-sex peers to have similar interests to their own (Martin, Eisenbud, & Rose, 1995).

The ability to attach new characteristics to gender stereotypes becomes more apparent in preschool years (Gelman, Collman, & Maccoby, 1986; Bauer & Coyne, 1997). In addition to being able to attach new characteristics to gender stereotypes, children are very aware of the traditional gender stereotypes (Powlishta, 2003). This knowledge has been demonstrated to exist already in toddlers in regards to toys, as they can easily tell whether a boy would rather play with a doll or a truck (Serbin, Poulin-Dubois & Eichstedt, 2002).

By 24 to 30 months children can answer more direct questions about associations between sex and objects, occupations, activities or clothing. On many measures, knowledge of these sorts of stereotypes has been shown to reach ceiling during early childhood (Serbin et al., 1993; Signorella, 1987). Knowledge of more abstract gender stereotypes such as personality stereotypes develop later than concrete object and activity stereotypes (Powlishta, 2003). The development of gendered personality stereotypes was discussed in more detail in Chapter 1.

That children are so knowledgeable about gender stereotypes and also very willing to use them suggest that they may engage in the same sort exaggeration of between-group differences and within-group similarities as seen in minimal group experiments (Powlishta, 2003). The possibility of them reporting actual differences and similarities between and within sexes is slight, as an overwhelming amount of evidence shows highly overlapping qualities and great within-sex variability in preferences, interests, aspirations, traits, skills and interpersonal styles (Powlishta, 2003). The only actual differences in behaviour found between girls and boys are playmate preferences, rough-and-tumble play, direct aggression and the themes enacted in pretend play. For example, Ruble and Martin (1998) found little evidence to support stereotypes such as those involving pro-social behaviour, moral reasoning, passivity or dependence.

Social Identity Theory, developed by Tajfel and Turner (1979), is the most prominent general theory of prejudice. The theory was originally developed to understand the psychological basis of intergroup discrimination. Social identity is the individual's self-concept derived from perceived membership of social groups (Hogg & Vaughan, 2002). In other words, it is an individual-based perception of what defines the 'us' associated with any internalized group membership. This can be distinguished from the notion of personal identity which refers to self-knowledge that derives from the individual's unique attributes.

Social Identity Theory asserts that group membership creates self-categorization and enhancement in ways that favour the in-group at the expense of the out-group. The examples (minimal group studies) of Tajfel and

Turner (1986) showed that the mere act of individuals categorizing themselves as group members was sufficient to lead them to display ingroup favouritism. After being categorized for a group membership, individuals seek to achieve positive self-esteem by positively differentiating their ingroup from a comparison outgroup on some valued dimension. In-groups become extensions of the self, especially when the group membership is valued and salient. This results in one's self-esteem being linked to the evaluations of one's group.

Social Identity Theory has also been brought into the developmental debate. According to its premise, once children learn that two sexes exist and that they belong to one of these it becomes instinctive to them to evaluate their own sex more positively than the other (e.g. Bigler, Jones & Lobliner, 1997; Lutz & Ruble, 1995). Such in-group favouritism motivates a competitive orientation in which one of the easiest ways to boost one's own self-image is to elevate one's own group by disparaging the out-group. However, among young children feelings towards the other sex often account to a complete rejection rather than just a mild in-group bias (Yee & Brown, 1994).

Children express greater dislike for, and assign more negative traits to other-sex peers, and spend up to 11 times more time playing with same-sex as compared to other-sex partners (Maccoby & Jacklin, 1987). These feelings, behaviours and beliefs towards the other sex confirm that relations are predominantly hostile (Glick & Hilt, 2000). Interestingly, research has demonstrated (e.g. Powlishta et al., 1994; Yee & Brown, 1994) that girls exhibit more hostile attitudes towards boys than vice versa.

Conclusions

Unlike in many other fields of psychology it seems that theories of gender development are not conflicting as much as complementary to one another. The current social learning theories accept that children's cognitive development, the structuring of gender schemas and understanding the permanence of different categories interact with the influence that society, family, peers and media have on children as they develop. Similarly the modern cognitively-based theories recognise the impact of social roles and the biological basis on which gender roles and attitudes have been built upon.

A baby girl, in general, differs from a baby boy because their reproductive organs, physical qualities and perhaps even some cognitive processes are different. These differences have historically determined the roles of men and women, boys and girls in the society. Albeit these roles are evolving, they still place different expectations on the two sexes that are communicated to children through gender-role socialization and social roles, and which also result in the development of their own gender schemas according to which they will strive to behave.

The empirical studies presented in this thesis will attempt to evaluate the developmental theories presented in this chapter. Based on the overall results as well as on possibly found gender and age differences, inferences can be made about aspects of each of the theories. However, consistent with the most recent versions of social role, cognitive and socialisation theories that have accepted the multifaceted influences on the development of children's gender role development it is recognised that none of the theories presented thus far can alone account for the phenomena being investigated within the thesis. Hence a number of the theories will be discussed when formulating the hypotheses and exploring the findings.

Furthermore, as this chapter has highlighted society and culture are also powerful agents in children's gender-role acquisition and differences between nations can cause children to acquire very different gender roles and attitudes. Therefore, the next chapter will introduce the two countries examined in this thesis, the UK and Finland. The analysis of the societal structures and the position of the two sexes within these countries will be important in setting hypotheses for the consequent empirical studies.

Chapter 3: Cross-cultural comparisons between the UK and Finland

This chapter introduces the two countries examined in the thesis: The UK and Finland. The central aim of the chapter is to present information about both countries that provides a rationale for empirical investigation of cross-cultural differences in gender-related attitudes of children and adolescents. To this end, a brief history and description of both countries is given, followed by a summary of the evolution of women's position in both. The remaining of the chapter highlights differences in current situation of men and women (e.g. employment, family composition, welfare policies) that are likely to influence the attitudes pertinent to this thesis.

The United Kingdom

The United Kingdom, often referred to as 'Britain', is a constitutional monarchy and unitary state composed through a political union of four constituent entities: England, Scotland and Wales of Great Britain, and the province of Northern Ireland. The UK has close relationships with the other Commonwealth countries, which all share the same monarch as the head of state. The UK has a highly developed economy and the fifth-largest gross domestic product in the world. It is one of the most densely inhabited states of the European Union and a founding partner of both the United Nations (UN) and the North Atlantic Treaty Organisation (NATO). The geographical position of the UK can be seen in Figure 1 (p. 66).

The United Kingdom was a dominant industrial and maritime power during the 19th century, and is often credited with being the nation that ‘created the modern world’. This reputation is based on the UK playing a leading role in developing Western ideas of property, capitalism and parliamentary democracy, as well as advancing world literature, science and technology. At its zenith, the British Empire stretched over one quarter of the Earth's surface and made up a third of its population. However, the first half of the 20th century saw the UK's power seriously dwindling as a result of the two World Wars. The second half witnessed the dismantling of the Empire and the UK rebuilding itself into a modern, prosperous nation.

The population of the UK rose above 60 000 for the first time in 2006 (the Office of National Statistics). The UK’s overall population density is one of the highest in the world. Almost one-third of the population lives in England's affluent south-east and is predominantly urban and suburban. Approximately 7.2 million people live in the capital London. The UK is a diverse society with a long history of immigration. During the last fifty years in particular, it has become increasingly multicultural. The 2001 Census showed a 53 per cent growth in the minority ethnic population between 1991 and 2001 (i.e., from 3.0 million in 1991 to 4.6 million in 2001). At the 2001 Census, 93 per cent of the UK population described themselves as white; although not necessarily British, while the remaining 7 per cent (4.6 million) belonged to non-white ethnic minority groups. Forty-five percent of the ethnic minority population lives in the London area, while in South West and North East the ethnic minorities count for less than two per cent of the population.

The UK economy was the first in the world to enter the Industrial Revolution, and initially concentrated on heavy industry such as shipbuilding, coal mining, steel production and textiles. The British Empire created an overseas market for British produce, allowing the UK to dominate international trade in the 19th century. However, as other nations started to industrialise, the UK began to lose its economic advantage, and heavy industry declined throughout the 20th century. The service sector however has grown substantially, and in 2005 made up 72% of GDP. The current economy is based on the Anglo-Saxon model, focusing on the principles of liberalisation, the free market, and low taxation and regulation. Based on market exchange rates, the United Kingdom is the fourth largest economy in the world and the sixth largest by purchasing power parity (PPP) exchange rates.

The UK has been a member of the European Union since 1973. As a whole, the public opinion in the country could be described as 'Euro-sceptic'. The attitude of the present government towards further integration is rather conservative, and the official opposition to the EU advocates a return of some powers to the UK. The UK chose not to adopt the EU currency Euro in 1999, as domestic public opinion ran strongly against such a move. Currently, there is also strong opposition to European Constitution, which is widely viewed as a step towards further loss of national autonomy.

Finland

The Republic of Finland is one of the five Nordic countries[5]. It is situated in northern Europe, bounded by the Baltic Sea with the Gulf of Finland to the south and the Gulf of Bothnia to the west. Finland has land frontiers with Sweden in the west, Norway in the north and Russia in the east. Figure 1 illustrates Finland's geographical position in Europe. Finland's population of five million people is spread over more than 330,000 square kilometres, making it one of the most sparsely populated countries in the world.

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[5] Nordic Countries include Sweden, Norway, Denmark, Iceland and Finland while Scandinavia refers to Norway, Sweden and Denmark only.

The beginning of Finland's nearly 700-year association with the Kingdom of Sweden is traditionally connected with the year 1154 and the hypothesized introduction of Christianity by Sweden's King Erik. Swedish became the dominant language of administration and education; Finnish chiefly a language for the peasantry, clergy and local courts in predominantly Finnish-speaking areas. During the 18th century, virtually all of Finland was twice occupied by Russian forces (1714–1721 and 1742–1743), known by the Finns as the Greater Wrath and the Lesser Wrath. In 1808, Finland was conquered by the armies of Russian Emperor Alexander I, and thereafter became an autonomous Grand Duchy under the Russian Empire until the end of 1917.

On December 6, 1917, shortly after the Bolshevik Revolution in Russia, Finland declared its independence. The independence was acknowledged and accepted by the head of Bolshevist Russia, Vladimir Lenin. In 1918, the country experienced a brief but bitter Civil War that coloured domestic politics for many years. The Civil War was fought between 'the whites', who gained support from Imperial Germany, and 'the reds', who were supported by the Bolshevist Russia. The reds consisted mostly of rural and industrial workers who, despite universal suffrage in 1906, felt themselves to lack political influence. The white forces were mostly made up of bourgeoisie and wealthy peasantry, politically more to the right. In the end of the bitter war that divided the nation, the whites overcame the reds.

During World War II, Finland fought the Soviet Union twice: in the Winter War of 1939–1940 and in the Continuation War of 1941–1944. As it became clear that the Nazis were not going to win the war, the Finns were forced to try to cut their losses and sided with the Soviet Union. During the Lapland War of 1944–1945, Finland forced the Germans out of northern Finland. Post-war treaties with the Soviet Union included obligations, restraints and reparations as well as Finnish territorial concessions. The reparations to the Soviet Union forced Finland to transform itself rapidly from a primarily agrarian economy to a highly industrialized nation. After all reparations were fulfilled, the Soviet Union remained the key trading partner of Finland.

After the Second World War, neutral Finland lay in the grey zone between the western countries and the Soviet Union. The Finno-Soviet Pact of Friendship, Cooperation, and Mutual Assistance gave the Soviet Union some influence in Finnish domestic politics and included a guarantee whereby Finland promised to defend her territory and airspace against Germany or her allies. This treaty prevented Finland from joining the NATO when it was formed in 1949. During the Cold War, Finnish society had a strong tendency of self-censorship regarding Finno-Soviet relations, and the press was often reprimanded or given instructions in handling Soviet-related issues. There was virtually no criticism or objective discussion of communism or the Soviet Union in Finland. This phenomenon of self-censorship was given the name 'finlandisation' by the German press.

However, unlike most other countries bordering the Soviet Union Finland maintained a democratic government and a market economy. The post-war era was a period of rapid economic growth and increasing prosperity and stability for Finland as the war-ravaged agrarian country was transformed into a technologically advanced market economy with a sophisticated social welfare system. When the Soviet Union fell in 1991, Finland suffered economically, but was free to follow her own course. Finland joined the European Union in 1995 where, in contrast with the other Nordic countries that are predominantly supportive of confederalism, she is an advocate of federalism. Finland was one of the eleven countries that joined the euro monetary system (EMU) in 1999.

In the past, Finnish trade relationships and politics were by large determined by avoiding any conflict with first the Imperial Russia and then the totalitarian Soviet Union. Despite the hindrance caused by an influential neighbouring country, Finland eventually became one of the most globalized nations in the world. For decades, Finland has had a highly industrialised, largely free-market economy with a per capita output roughly equal to that of other western economies such as the UK, France and Germany. Its key economic sector is manufacturing of principally wood, metal, engineering, telecommunication and electronic products. Trade is important, with exports equalling almost one-third of GDP. Finland has been declared the most competitive country in the world for three consecutive years 2003-2005 by the World Economic Forum. Furthermore, the World Audit study declared Finland the least corrupted and most democratic country in the world in 2005.

EUROPE
Greenland (DENMARK)
Jan Mayen (NORWAY)
Greenland Sea
Denmark Strait
Norwegian Sea
Barents Sea
Reykjavík
ICELAND
Hammerfest
Tromsø
Murmansk
Kiruna
Luleå
Oulu
Arkhangel'sk
White Sea
NORWAY
FINLAND
SWEDEN
Umeå
Trondheim
Tórshavn
Faroe Islands (DENMARK)
SHETLAND ISLANDS
ORKNEY ISLANDS
HEBRIDES
Rockall (U.K.)
Gulf of Bothnia
Tampere
Turku
Helsinki
St. Petersburg
RUSSIA
Bergen
Oslo
Stavanger
Gävle
Stockholm
ÅLAND ISLANDS
Tallinn
ESTONIA
Moscow
North Atlantic Ocean
Aberdeen
Glasgow
Edinburgh
UNITED KINGDOM
Belfast
Dublin
IRELAND
Leeds
Manchester
Liverpool
Birmingham
Cardiff
London
North Sea
Göteborg
Gotland
Riga
LATVIA
Baltic Sea
Öland
DENMARK
Copenhagen
Malmö
Bornholm
Kaliningrad
RUSSIA
LITHUANIA
Vilnius
Vitsyebsk
Smolensk
Mahilyow
Minsk
BELARUS
Hrodna
Homyel'
Gdańsk
Hamburg
Bremen
Berlin
Poznań
Warsaw
POLAND
Łódź
Wrocław
Brest
Kiev
Rivne
Amsterdam
Rotterdam
NETH.
Essen
Cologne
Leipzig
Brussels
Lille
BEL.
Bonn
GERMANY
Frankfurt am Main
Luxembourg
LUX.
Prague
CZECH REPUBLIC
Brno
Kraków
L'viv
UKRAINE
Chernivtsi
Mykolayiv
Chişinău
Iaşi
MOLDOVA
Odesa
Celtic Sea
English Channel
Guernsey (U.K.)
Jersey (U.K.)
Paris
Nantes
Strasbourg
Stuttgart
Munich
Vienna
AUSTRIA
Bratislava
SLOVAKIA
Budapest
HUNGARY
Cluj-Napoca
ROMANIA
Bucharest
Constanţa
Black Sea
Bay of Biscay
FRANCE
Lyon
Zürich
Bern
Geneva
SWITZ.
LIECH.
Vaduz
Ljubljana
SLOVENIA
Zagreb
CROATIA
BOSNIA AND HERZEGOVINA
Sarajevo
Belgrade
YUGOSLAVIA
Varna
BULGARIA
Sofia
Bordeaux
Milan
Venice
Turin
Genoa
SAN MARINO
MONACO
Florence
ITALY
Rome
Adriatic Sea
Bilbao
Toulouse
Andorra la Vella
ANDORRA
Marseille
Ligurian Sea
Skopje
F.Y.R.O.M.
İstanbul
Bursa
Porto
Zaragoza
Madrid
Corsica
VATICAN CITY
Naples
Tirana
ALB.
Thessaloniki
TURKEY
PORTUGAL
Lisbon
SPAIN
Valencia
Barcelona
Balearic Sea
Sardinia
Tyrrhenian Sea
GREECE
Aegean Sea
İzmir
Athens
Sevilla
BALEARIC ISLANDS
Cagliari
Ionian Sea
Gibraltar (U.K.)
Málaga
Mediterranean Sea
Palermo
Sicily
Rhodes
Strait of Gibraltar
Alboran Sea
Ceuta (SPAIN)
Melilla (SPAIN)
Oran
Algiers
Tunis
Crete
Rabat
Casablanca
MOROCCO
ALGERIA
TUNISIA
Valletta
MALTA
Arctic Circle
F.Y.R.O.M. - The Former Yugoslav Republic of Macedonia
Scale 1: 19,500,000
Lambert Conformal Conic Projection, standard parallels 40°N and 56°N
0 300 Kilometers
0 300 Miles
802831AI (R01083) 10-01

Figure 1. Map of Europe (2006)

Comparing the UK and Finland

When comparing the UK and Finland there appear to be more similarities than differences between the two countries. Both countries belong to the EU, are highly industrialised and developed, and in global comparison regarded as western democracies with extensive welfare systems and strive towards equal opportunities for all (Korpi, 2000). However, there are a number of differences that are particularly relevant to the current research. The UK and Finland vary in their basic organisation of economy and welfare. The United Kingdom has the fourth-largest economy in the world, is the second-largest economy in the European Union and is a major international trading power. It is classed as a diversified, market-based economy with social welfare services that provide most residents with a high standard of living. In European comparison, the UK has high levels of class and medium levels of gender inequality (Korpi, 2000).

By contrast, Finland falls in the category of dual earner society with 'encompassing' social insurance and low levels of both class and gender inequality (Korpi, 2000). In other words Finland, similarly to other Nordic countries, has a large tax funded public welfare sector and extensive social legislation. In all Nordic countries, these are the result of political ambitions of many consecutive Social Democrat governments that first gained power during the interwar period. In Finland, universal services and benefits form a safety net for all citizens and decrease individual's dependence on family or marital status.

The UK and Finland on Hofstede's Cultural Dimensions

The UK and Finland also differ from each other significantly on Hofstede's Cultural Dimensions Index (2001), which is a measure of cross-cultural comparison. This measure assesses cultures on four dimensions: Individualism, Masculinity, Uncertainty Avoidance and Power Distance. For the UK and Finland, the largest country differences emerge on the dimensions of individualism and masculinity as on both these factors the UK scores significantly higher than Finland.

The individualism index is based on the degree the society reinforces individual or collective achievement and interpersonal relationships. According to Hofstede (2001), high individualism scores indicate that individuality and individual rights are paramount within the society while a low ranking typifies societies of a more collectivist nature with close ties between individuals. These collectivist cultures reinforce extended families and collectives where everyone takes responsibility for fellow members of their group.

A score of 89 makes the UK one of the most individualistic countries in the world, behind of only the USA (91) and Australia (90). Finland scores 63 on individualism, a score that is lower than that of, for example, Sweden (71), Norway (69) and France (71), but higher than scores of, for example, Spain (51), Austria (55) or Poland (60). Figure 2 illustrates the UK and Finland's Individualism scores in international comparison.

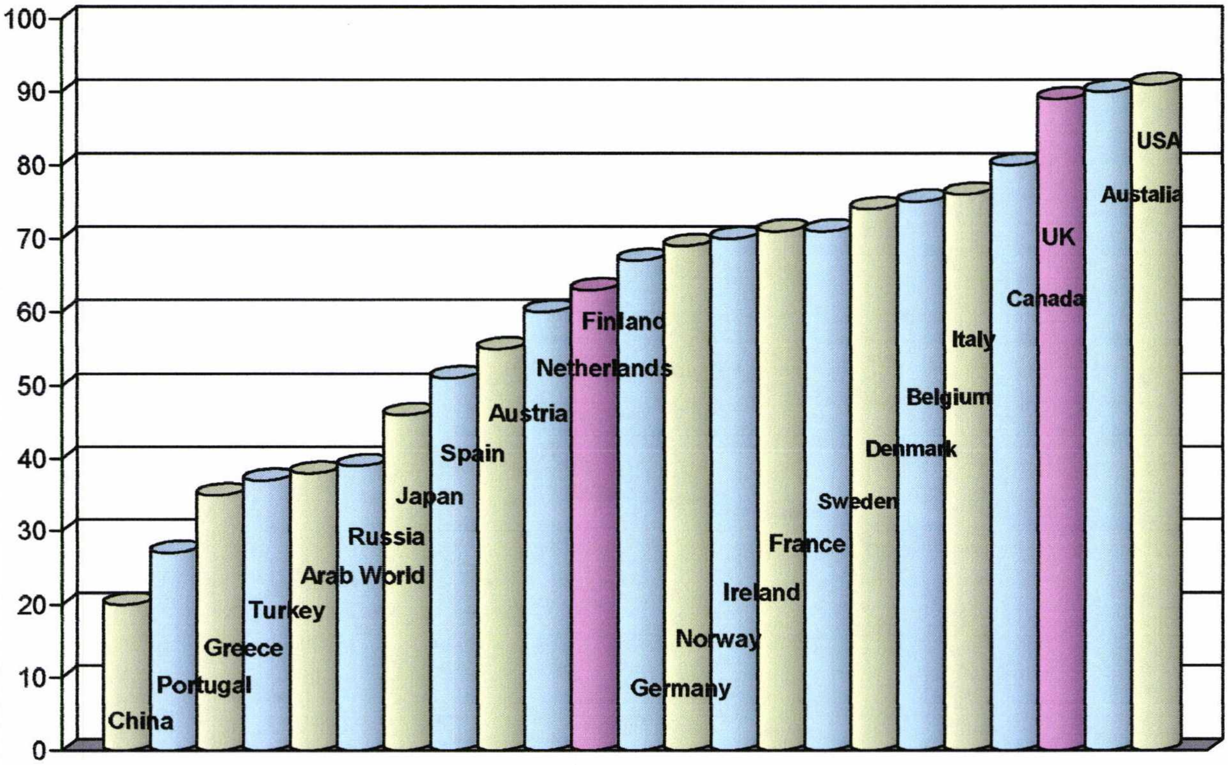

Figure 2. International comparison of individuality scores [based on scores reported by Hofstede (2001)]

The masculinity index focuses on the degree the society reinforces the traditional masculine role of male achievement, control and power. A high ranking indicates that the country experiences a high degree of gender differentiation. In these cultures, males dominate a significant portion of the society and power structure. A low ranking on the masculinity index indicates that a country has low levels of differentiation and discrimination between genders. In these cultures, females are treated equally to males in all aspects of the society. Overall, masculine cultures emphasise individual achievement, power and productivity while feminine cultures support the notions of equality, cooperation and modesty.

On masculinity the UK scores 66, which is much higher than the world average of 50 but lower than the scores of Austria (79), Hungary (88) and Japan (95). Finland's score (26) is much below the world average, yet clearly higher than scores of fellow Nordic countries Sweden (5), Denmark (16) and Norway (8). A clear indication of cultures' femininity is the way public funds are used. Finland and other Nordic countries spend approximately one third of their Gross Domestic Product on education, health and social welfare as it is deemed necessary that everyone's basic needs are met. This results in a higher than average income taxation, and in comparison to other European countries or the US, the people in Nordic countries pay extremely high levels of tax. Figure 3 illustrates Finland and the UK's scores in international comparison of Masculinity.

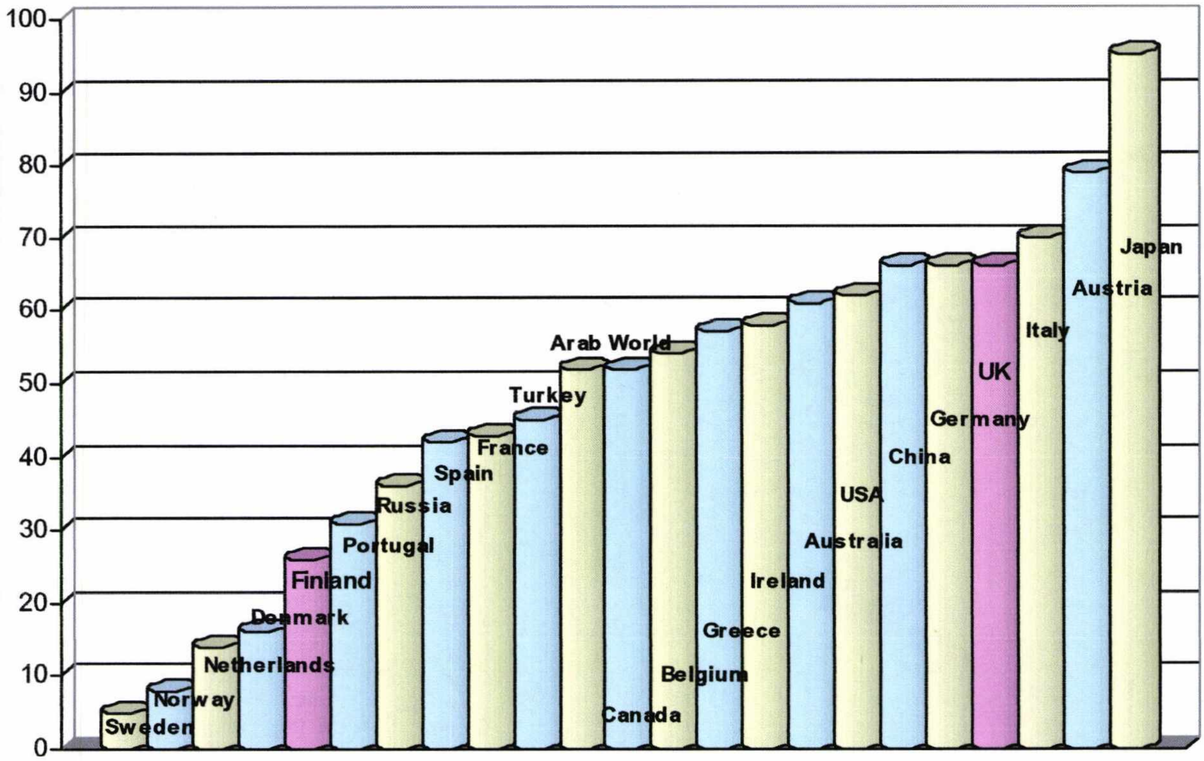

Figure 3. International comparison of Masculinity scores [based on scores reported by Hofstede (2001)]

Hofstede's measure of overall equality within society, the power distance index, focuses on the degree of equality, or inequality, between people in the society. Both the UK (35) and Finland (30) score rather low on this compared to the world average of 53, which indicates that both countries de-emphasise the differences between citizens' power and wealth, and that equality and opportunity for everyone are viewed important. Low score also demonstrates a democratic society where the leaders do not use coercion or dictatorial means to maintain their power or to accomplish their political goals.

The fourth of Hofstede's measures, the uncertainty avoidance index, focuses on the level of tolerance for uncertainty and ambiguity within the society. This is the only measure out of four on which Finland scores significantly higher than the UK (scores of 59 and 35 respectively). These are both below the word average of 61. A high score indicates country to have a low tolerance for uncertainty and ambiguity thus creating a rule-oriented society that institutes laws, rules and regulations to reduce uncertainty. In contrast, a low score indicates a country to have less concern about ambiguity and uncertainty and more tolerance of a variety of opinions. This is reflected in a society that is less rule-oriented, accepts change more readily and takes more and greater risks. Figure 4 illustrates how Finland and the UK compare to other countries on uncertainty avoidance.

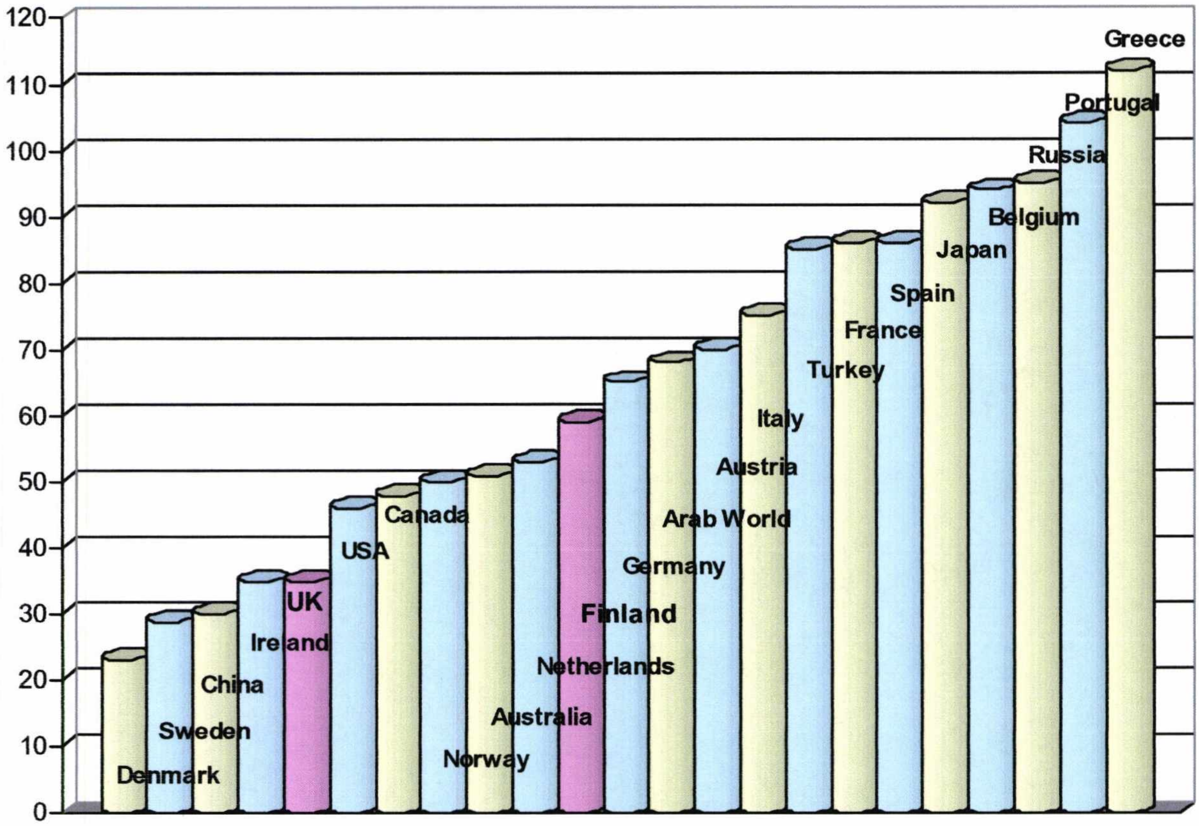

Figure 4. International comparison of Uncertainty Avoidance [based on scores reported by Hofstede (2001)]

The UN Human Development and Poverty Indexes

The UN Human Development Index (HDI) is a comparative measure of poverty, literacy, education, life expectancy, childbirth, and other factors relating to overall well-being of people. It is a standard method of measuring well-being, especially child welfare. The HDI measures the average achievements in a country in three basic dimensions of human development: (1) a long and healthy life, as measured by life expectancy at birth; (2) knowledge, as measured by the adult literacy rate and the combined primary, secondary, and tertiary gross enrolment ratio; and (3) a decent standard of living, as measured by gross domestic product (GDP) per capita at purchasing power parity (PPP) in USD. Each year, UN member states are listed and ranked according to these measures. In 2005, the UK was ranked 15th and Finland 13th on this measure.

The Human Poverty Index is an indication of the standard of living in a country, developed by the United Nations. The UN considers this a better indicator than the Human Development Index, which in turn is considered a better indicator than the Gross Domestic Product. On this measure, the UK was ranked 15th and Finland as third in the world in 2003.

Specific measures of women's position

In addition to Hofstede's index of masculinity, there are some other measures that have been used cross-culturally to specifically examine women's position in comparison to men's. The World Economic Forum (2005) attempted to measure the current overall gender gap in 58 countries by examining five key indicators of women's position. These indicators included economic participation, economic opportunity, political empowerment, educational attainment and health and well-being. In this survey, Finland was shown to have the fifth smallest gender gap in the world behind the Nordic countries Sweden (1), Norway (2), Iceland (3) and Denmark (4), while the UK was ranked eighth. The positions between Finland and the UK were occupied by Canada (6) and New Zealand (7).

Another relevant evaluation of the gender divide is the Gender Empowerment Measure (GEM), which measures the participation of women and men in political decision-making. The data on which the GEM analysis is based upon is collected by the United Nations. This index has four indicators: female members of the legislature, female participation in selected positions in public and private sector, female participation in academic and technical work and estimated income. In 2002, Finland was ranked fifth in the world and the UK was ranked 16th. Sweden, Norway, Denmark and Iceland yet again occupied the top four positions.

History of women's position in the UK

Middle- and upper-class women's position in the UK was largely transformed during the Victorian period (1837-1901). This period was characterised by the notion of separateness of male and female spheres: woman were in private sphere of the home and hearth while men occupied the public sphere of business, politics and sociability. The Victorian era emphasised woman's role as a spouse and mother and domesticity and motherhood were portrayed as sufficient emotional fulfilment for women (Abrams, 2001). The women were seen as having a moral duty to put their families and husband first and to serve the society as a whole through their domestic responsibilities and innate selflessness (Abrams, 2001).

The separateness of private and public domains and the roles of the sexes were based on evangelical beliefs about the importance of the family and women's innate moral superiority (Abrams, 2001). However, the lives of working class women were considerably different from their upper-class counterparts. Although the idea of a male breadwinner was increasingly regarded as the ideal and normative, in reality many households drew income from a number of sources as many women and children added to wage earning even if their employment was more sporadic and low-paid than that of adult males.

Indeed, female employment in the 1850s, 60s and 70s in the UK was higher than during any subsequent decades until after World War II. Exploration of family budget evidence suggests that around 30-40 percent of women from working class families contributed significantly to household incomes during this period (Hudson, 2001). Overall, urbanisation created many new opportunities for female employment despite the regulation of working hours and conditions and the introduction of compulsory education in 1871 (Hudson, 2001). However, the records of female employment during the 19th century are very unreliable and therefore prevent an accurate review of history of female employment in the UK being conducted. The reasons for hazy records on female employment are due to women's work being mostly casual and hence not deemed important enough to declare. Furthermore, some women worked illegally or in unregulated sweatshops.

As the 19th century progressed, there was a greater prevalence of gender-specific employment which was often used to enhance control and discipline in the workplace. Supervisory roles were almost exclusively taken by men. Men also came to operate the most expensive and sophisticated machinery and to monopolise the high status and higher paid jobs even in textiles. The expansion of heavy industries such as iron, steel, mining, engineering and ship building in the latter half of the 19th century also created sectors which employed almost exclusively male labour and were associated solely with male attributes. The expansion of these sectors strongly endorsed the male breadwinner ideal. Therefore, the hardening of gender assumptions in the nineteenth century was closely associated with corresponding changes in the workplace.

Women's position in the UK during the 20th century can largely be defined by the Suffragette movement. The term 'suffragette' was first used in the Daily Mail on the 10th January 1906 and by March of that year it was in general use as a means of differentiating the militant campaigners of the Women's Social and Political Union (WSPU) from the suffragists (Murray, 2001). The WSPU called off its militant action whilst there was a common enemy - Germany - and recruited women to the weapons industry. By 1918 it was impossible to deny women's contribution to the war effort, and The Electoral Reform Bill of that year granted voting rights to all female property owners over the age of 30. It was not until 1928 that the age limitation on the right to vote became the same as that for men: 21. The first woman MP was elected in 1918, after which the next major breakthrough for women in politics was in 1929 when Margaret Bondfield became the first female cabinet minister.

After the Second World War, women's position in the UK retreated somewhat. As Murray (2001) wrote:

"Women were summarily sent back to the kitchen sink and there were indeed a few glitches in the fifties and sixties when the national mood demanded a return to the domestic status quo." (p.2)

The returning soldiers were given jobs occupied by women during the war, and women were required to reclaim the sole responsibility for housework and childcare. However, as Murray (2001) argues, a significant number of women had tasted the freedom of earning an income and hence started to demand more equality. During the 60s and 70s women argued for a form of democracy in the home where rights and responsibilities would be equally shared, while in the work place women started to request equal opportunity and equal pay. In 1970, the first British conference of the Women's Liberation Movement resolved to press for employment legislation. That same year the Secretary of State for Employment introduced the Equal Pay bill, which was enacted in 1975 together with the Sex Discrimination Act.

History of women's position in Finland

The overall position of women in Finland has been largely determined by the relatively late modernisation of Finnish society. In an agrarian society, men and women did not lead very different lives, which made it easier for men to accept that political rights should be extended to women also. Consequently, Finland's forerunner status in gender equality is, paradoxically, related to it remaining rather an unsophisticated society for longer than many other western welfare states (Taskinen, 2001).

Until the 1950s, when agriculture lost its status as the largest source of income in Finland, women worked alongside men on farms and were familiar with all the jobs that had to be done. As most tasks had to be done swiftly when the weather permitted, everyone had to take part in the work when the time came to do it. Consequently, Finland was never fertile ground for the concept of the 'non-working' woman. In the agrarian society the division of labour was flexible, but men did not do household work.

When child labour was restricted in the mid 19th century, the value of women as factory workers was realised. In 1880, 36 per cent of women worked outside the home. Female labour was cheaper than male labour and so women made up a considerable proportion of the labour force in factories. In 1910, almost one third of those employed in industry and handicrafts were women. Although women's productive labour was indispensable, it was never as recognised or appreciated than that of men. Overall, the developing Finnish society was characterised by the large working class population; the number of wealthy townspeople was small, and the actual upper class was never as influential as in other European countries.

Since the Second World War the proportion of women in the workforce increased markedly. In the 1960s and 1970s the proportion of women in the workforce was about 44 per cent, and in the beginning of the 21st century 70 per cent of Finnish women participated in the labour market. The rapid expansion of women's employment in the 1960s had a symbiotic relationship with the development of the Finnish welfare state. Political decisions on the development of public day care were based on the premise that women are involved in the labour market just as are men. Since the 1960s, the policy of the Finnish welfare state has been to build systems of public education, health care and day care that guarantee free or cheap access for all residents.

In 1988, the Washington-based Population Crisis Committee reported that Finland, slightly behind top-ranked Sweden and just ahead of the United States, was the second-best place in which a woman could live. When compared with women of other nations, Finnish women were privileged in international comparison. They were the first in Europe to gain the franchise and by the 1980s they routinely constituted about one-third of the membership of the parliament and held several ministerial posts. In the 1980s, about 75 percent of adult women worked outside the home and women made up about 48 percent of the work force.

Furthermore, in the 1980s Finnish women were as well educated as their male counterparts and the number of women studying at university level was slightly ahead of the number of men. In 1983 legislation arranged that both parents were to have equal rights for custody of their children. After a very heated national debate, legislation was passed in 1985 that gave women an equal right to decide what surname or surnames they and their children would use. These advances were capped by a law that went into effect in early 1987 forbidding any discrimination on the basis of sex and providing protection against it.

In Finland, the relationship between the two sexes is marked by a feeling of companionship. Finnish men have a comradely attitude towards women and a high praise for a woman by men is to be called ‘a good guy’. On the other hand, men display very little courtesy or politeness towards women (Nykänen, 2003). In principle, Finns have a positive view of equality among men and women. However, the participation of men in traditional women's work, as required by the principle of equality, is not easily achieved and entails problems (Nykänen, 2003). The improvement of the status of women and their achievements in traditional male fields has also led to fear, rejection and even aggressive reactions among some men (Nykänen, 2003).

Despite Finland's forerunner status in gender equality, Amnesty International reports that violence against women continues to be widespread in Finland. The last extensive study on the issue, conducted in 1998, showed that 40 per cent of women in Finland had been victims of physical or sexual violence or threats of violence by men, and 22 per cent of married women and women cohabiting with men had been victims of physical or sexual violence or threats of violence by their partner.

Gender pay gap and occupational gender segregation

In 2005 Finland was the only EU country where men did not form a majority of work force (Arulampalam, Booth & Bryan, 2005). In the UK men were in a slight majority, forming 50.5 per cent of work force. In both UK and Finland, there continues to be a wide gender pay gap but the patterns of the wage inequality are different. In UK the pattern of the wage gap can be defined as a 'sticky floor effect', which means that the pay discrepancy is larger among the low paid workers than at a higher level (Bryan, Arulampalam & Booth, 2006).

In contrast, the pattern of gender pay gap in Finland can be described as a 'glass ceiling effect' as the wage gap is low, or non-existing, among low paid employees but significant among the higher occupational groups (Arulampalam et al., 2005). Bryan, Arulampalan and Booth (2006) argued that the Finnish family policies enabling long leaves are sufficient to reduce the gender inequality at low and medium level, but do not offer enough support for women at the highest occupational level where long leaves and frequent absence is more damaging for the career development.

In the UK women working full time earn 13 per cent less than men based on median hourly earnings and 17 per cent less based on mean hourly earnings (Women and Work Commission, 2006). In 2005, Finnish women working full-time earned 23 per cent less per hour than did their male counterparts (Arulampalam et al., 2005). In the UK, the gender pay gap is even wider when considering those women who work part-time as they earn 32 per cent less than the median hourly earnings of women who work full time, and 41 per cent less than men who work full time (Women and Work Commission, 2006). In both countries, the higher the proportion of women in a given occupation, the lower the wage level tends to be for both men and women employed in it.

Occupational segregation is the key reason behind the gender pay gap worldwide. The term refers to the tendency for men and women to be employed in different occupations from each other. It is different from occupational concentration, which is concerned with the sex composition of the workforce in an occupation or a set of occupations (Siltanen, Jarman & Blackburn, 1995). Occupational segregation can be either horizontal or vertical, or both. Horizontal segregation refers to occupational sectors being divided into men's and women's areas (e.g. technology vs. healthcare), while vertical segregation means that men occupy managerial positions more frequently than women, even in ‘women’s sectors’ such as caring and catering.

In the UK nearly two-thirds of women are employed in 12 occupation groups: ‘the five Cs’ - caring, cashiering, catering, cleaning and clerical occupations, plus teaching, health associate professions and ‘functional’ managing. By contrast, men are employed in a wider range of jobs. Two thirds of men are employed in 26 occupation groups which, compared to women’s occupational groups, consists of more professional, management and technical roles, for example functional and production managers, transport drivers, engineers and information and communication technology professionals (Annual Survey of Hours and Earnings, 2006).

In the UK, gender segregation of occupations declined largely during the 1990s. This is attributed to the increased concentration of both men and women in service-related occupations (National Statistics, 2006). For example, medicine, pharmacy, law and accountancy have become much less segregated by gender. However, the 2001 census showed that women remained concentrated in the five lowest paid employment sectors and 60 per cent of women worked in just 10 occupational groups. In 2001 women made up 84 per cent of employees in personal services, 78 per cent of employees in administrative and secretarial work and 71 per cent of employees in sales and customer services. They formed only nine per cent of employees in skilled trades, 17 per cent of machine operatives and only 34 per cent of women were managers, senior officials or professionals.

In Finland, the occupations are divided into men and women’s sectors more than nearly anywhere else in the world. For over a decade, the proportion of women in 'non-traditional' sectors such as IT or building has been less than 20%, while the proportion of men in 'women's sectors', such as social work and nursing has been consistently below 10 per cent. There are significantly fewer female than male entrepreneurs (less than one third) and most of the female entrepreneurs function in the traditionally female service section. Segregation of occupational sectors is further augmented by differentiation between the public and private sector. While females form the majority in the public sector, men work mostly in the private sector where benefits and salaries are notably higher.

Apart from occupational segregation, the large pay gap in the UK can be attributed to many women working part-time. In 2004, 44% of employed women in the UK worked part-time compared to only 18% in Finland. Accordingly, the average gender gap in weekly employment hours is 24 in the UK but only six in Finland (Commission of the European Communities, 2004). Men's part-time work is equally uncommon in the UK and Finland (less than eight per cent in both, Commission of the European Communities, 2004). The gender gap in labour force participation is also larger in the UK than Finland, standing at 11per cent as opposed to three per cent in 2004.

Family policies and work patterns of parents

In Finland both mothers and fathers tend to be employed more often than people of working age that have no children (Taskinen, 2001). In Finland employment of mothers is 70 per cent compared to 58 per cent for childless women, but a 1998 survey showed that only 45% of mothers with children under three years of age worked (Taskinen, 2001). Many mothers go back to work when their child turns three and yet more once the child reaches seven, which is when Finnish children start school. Overall the Finnish benefit system encourages parents to look after young children at home by offering cash-for-care type benefits. Because benefits during maternity or paternity leave does not completely compensate for earnings, it is more profitable for the parent on a lower income to stay at home. More often than not, this is the mother.

In EU-wide comparison, the countries with the highest total duration of maternity and childcare leave are Finland, Spain, France and Germany. The lowest are found in the UK, followed by Ireland (Organization for Economic Cooperation and Development, 2005). Consequently, the proportion of children below the age of three in formal childcare is larger in the UK (34%) than in Finland (22%) (OECD, 2005). Table 1 summarizes the current parental leaves available for families in Finland and the UK.

Table 1.

Summary of Parental Leaves and Childcare Benefits in the UK and Finland

FINLAND	UK
18 week maternity leave (paid at approximately 80% of normal earnings) 3 week paternity leave (paid at approximately 80% of normal earnings) A 158-day paid family leave, which can be shared by mother and father (paid at approximately 80% of normal earnings). Father's bonus leave: If father uses at least the last 12 days of parental leave they're entitled to extra 12 paid days as incentive The legislation grants a person in permanent employment the right to return to the same job after family leave Parents' allowance compensates for the loss of earnings during family leave (paid at approximately 80% of normal earnings) Child home care allowance can be paid to one parent until the child turns three All children under school age have a right to a municipal, reasonably priced and publicly funded day care	Statutory maternity leave of 26 weeks, paid at 90 per cent of weekly earnings for the first six weeks, then up to £108.85 a week for the remaining 20 weeks. Statutory paternity leave of 2 weeks, paid for one or two consecutive weeks at £108.85 or 90 per cent average weekly earnings if this is less Unpaid parental leave: 13 weeks before the child's fifth birthday All three- and four-year-olds in England are entitled to a free part-time early education place (five two-and-a-half hour sessions every week over 33 weeks) Child Tax Credit (CTC) and Working Tax Credit (WTC) help families on low or middle income with children.

According to Twomey (2002), 54 per cent of British mothers whose youngest child is below six years of age work outside the home, increasing to 70 per cent among those whose youngest child is between seven and eleven, and to 75 per cent among those who's youngest is 12 to 15 years. Women's likelihood of working part-time is closely related to the age of their youngest child and decreases as their youngest child gets older: 67 per cent of working mothers with a child aged under five worked part-time compared to 45 per cent of those whose youngest child was aged 16-18 years (Twomey, 2002). By comparison, only 32 per cent of women with no dependent children worked part-time.

The UK is the only country in the EU to have opted out from the 1993 EU Working Time Directive (WTD). The WTD laid down provisions for a maximum 48 hour working week and a minimum of four weeks paid leave per year. The WTD applies to all sectors of activity, both public and private. Due to opting out of the WTD, the UK is the only EU member state where weekly working time has increased over the last decade. Latest figures show that about 16 per cent of the workforce currently works more that 48 hours per week, compared to 15 per cent at the beginning of the 1990s (Department of Trade and Industry, 2006). About eight per cent of the workforce says they work over 55 hours per week, approximately three per cent over 60 hours per week, and one per cent over 70 hours per week.

It's also worth noting that in the UK fathers of young children work considerably longer hours than other men (Dex, 2003). More than half of all British fathers work more than a 40-hour week, including 30 per cent who routinely exceed the 48 hours a week limit set by the EU Working Time

Directive. Additionally, nearly half of fathers routinely work approximately every other Saturday (Dex, 2003). Similarly, in Finland fathers of small children tend to work more hours than other men (Taskinen, 2001), but as the work hours are regulated by the WTD, excessive work times occur less frequently than in the UK.

Division of housework and childcare

In both countries mothers, including those working full- or part-time outside the home, spend considerably more time on domestic tasks than fathers (Taskinen, 2001). In the UK, working mothers with children put twice as many hours into housework as their partners despite the possibility of 'role reversal' in earnings (Harkness, 2005).

Although housework is still very much a responsibility of mothers, fathers in both countries are increasingly involved in childcare. A longitudinal EU survey (European Commission, 2002, scope: 1994-2001) studied the proportion of parents spending a substantial amount of time with their children (28+ hours per week). The British and Finnish results reflect the country differences in mothers' employment patterns as 66% of Finnish mothers whose youngest child is six years or younger spends a substantial amount of time with them compared to 86% in the UK. The nationality difference is even larger among mothers whose youngest child is between six and 16 years old, as 80% of the British mothers spend substantial time with them compared to 42% of Finnish mothers.

A bigger proportion of the Finnish fathers of young children (six years or younger) than the British (29 vs. 24%) spend substantial amount of time with their children, perhaps reflecting the long work-hours culture in the UK. Interestingly, in the UK the proportion of fathers spending substantial amount of time with their children who are older than six but younger than 16 is not much lower than for fathers of younger children (22%). In Finland however, the proportion drops significantly from 29% to 17%.

Family Composition

In most European countries family structures are becoming more diverse. Cohabitation of unmarried couples is increasing, a large proportion of children are born out of marriage and there are more single person households than ever before. Throughout Europe, there has been a trend towards smaller households, with the EU-15[6] average declining from 2.8 to 2.4 between 1981 and 2002. Household composition has also changed throughout Europe, with a typical pattern of an increase in small households consisting of one person or a lone-parent and children, and a decline in married couple households. In the UK, one in four dependent children lived in a lone-parent family in 2004. This was an increase from one in 14 in 1972. In Finland, one in five dependent children lived in a lone-parent family in 2003.

Looking at the EU-15 in 2001, before the accession of the Eastern European countries, there was a marked decline of more than a third in the number of marriages over a thirty year period, from nearly 8 per 1000 people in 1970 to 5 per 1000 people in 2001. For example, more people cohabit before they marry and more marriages are re-marriages, where the partners are typically older than in first marriages. Divorce rates throughout Europe climbed overall between 1960 and the mid 1980s and the risk of divorce for newer cohorts of marriages is higher than for older marriages. According to the Heritage Foundation figures in 2002, in the UK approximately 43 per cent of couples who got married in 1984 divorced.

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[6] EU-15 includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and United Kingdom

In Finland, the marriage act that came into force in 1988 made the dissolution of marriage less difficult. In Finland today, all that is needed for a divorce is an application by one of the spouses. Following this amendment to the law there was a large increase in the number of divorces. It was generally believed that the number of divorces would return to something like its previous level after the backlog of 'repressed' divorces had been cleared. This did not happen and Finland still ranks high on the divorce list in Europe. According to the Heritage Foundation figures in 2002, approximately 51 per cent of Finnish couples who got married in 1984 divorced.

However, the divorce statistics do not reflect the full extent of relationship breakdowns as break-ups among the large number of cohabiting couples are not included in these statistics. Throughout Europe, there has been an increase in the number of couples living together as unmarried cohabiters (about 9% of all couples across the EU). However, these rates vary across the member states, ranging from over 20 per cent in Sweden and Finland to very few in the Southern countries (such as Spain and Portugal). In 2004, 61 per cent of Finnish couples aged 30 and below and cohabiting were not married compared to 53 per cent in the UK. Generally, where cohabitation rates are high, there are higher proportions of cohabiting couples with children. In both countries there has been a rise in the proportion of births occurring outside marriage. In 1980, 12 per cent of all births in the United

Kingdom were outside marriage but by 2004 this had increased to 42 per cent. This trend can also be observed in Finland where 42 per cent of all children born in 2004 were born out of wedlock.

Partly as a result of later parenthood, but also for other social and economic reasons that are not entirely understood, couples across the EU are having fewer children than previously. According to the CIA (2005), the estimated number of children to be born to Finnish and British women was 1.73 and 1.66 respectively. In comparison to the EU average however, the number of children has remained relatively constant in Finland and other Nordic countries over the past couple of decades. This can be attributed to widely available childcare options, which have enabled women to combine their careers with having children with greater ease than in other EU countries (Pylkkänen & Smith, 2004). Compared to other western European countries, the birth rate in Finland is high remaining continuously above 1.7 since the late 1980s. Of the women who are nearing the end of their child-bearing age 15 per cent are childless and the future indicators show that over 20 per cent of today's young women in Finland will remain childless.

The fertility patterns in the UK over the last 30 years or so have been characterised by smaller overall fertility rate, rising mean age at first birth and higher levels of childlessness. In 2004, the mean age of British women having their first baby was 27.1 years. This was a rise of 3.4 years from 1971. Around one in five women currently reaching the end of their fertile life are childless. The average number of children in a family declined from two in 1971 to 1.8 in 2004.

Conclusions

The most notable differences between the two countries that emerged in this chapter relate to the timelines of increasing equality between the sexes and to countries' standings on Hofstede's Cultural Dimensions Index. Firstly, it is clear that relative to the age of the nation itself, Finnish women have achieved a near-equal status with men much earlier than their British counterparts. This disparity can be mostly attributed to the late development of Finland as an independent country and an industrialised nation. However, it could be that because the Finnish women have had a greater equality with men than their British counterparts since the country declared its independence, Finnish people are more matter-of-factly about gender equality and take it for granted more than do the British.

Secondly, the two countries differed from each other clearly on three out of four measures of Hofstede's Cultural Dimensions. Finland scores notably low on individualism, while the UK's score is the third highest in the world. On masculinity, the two countries are on the opposite sides of the scale as the UK ranks as one of the most masculine countries and Finland as one of the most feminine countries in international comparison. On uncertainty avoidance Finland is clearly higher than the UK indicating Finns to have a lesser tolerance for ambiguity and to be keener to follow rules and regulations.

These differences are likely to have significant implications for the present thesis as they indicate the two nationalities to have very different values and priorities. In short, based on Hofstede's evaluation the UK emerges as a highly individualistic society where men hold more power than women and where speed, productivity, individual's rights and low taxation are deemed important. In contrast, Finnish people appear to hold much more communal values, to prefer clear rules over personal choices and to appreciate societal safety nets over low taxation and income based inequality. However, these national differences have not been previously examined in psychological research. The subsequent empirical studies will explore how the differences highlighted in this chapter translate into gender attitudes and stereotypes among the British and the Finnish. The next chapter will introduce the first empirical study, which investigates the nationality differences in adults' attitudes about family, employment and gender roles.

Chapter 4: Preliminary research on gender-role attitudes in the UK and Finland: Secondary analysis of ISSP 2002 data

This chapter presents the findings of a secondary analysis of the International Social Survey Programme's 2002 data on work and family attitudes among British and Finnish adults. The analysis was conducted in order to identify some differences in gender-role attitudes between British and Finnish people upon which the hypotheses of the subsequent empirical studies can be derived. The analysis was based on 3313 cases and the results suggest that the British endorse more traditional views on women's employment and division of household work. However, because the Finns expressed stronger belief in traditional family values, the study was not conclusive as to which of the two nationalities is more traditional in its gender attitudes overall.

The International Social Survey Programme

One of the only cross-cultural research programmes to compare gender-related attitudes in Britain and Finland is the International Social Survey Programme (ISSP) study conducted in 2002. The ISSP is a continuous programme of cross-national collaboration on social science surveys. The ISSP data collection started in 1985 and presently covers 40 countries, most of which are developed Western cultures. In the UK, the institution conducting the ISSP surveys is the National Centre for Social Research which was also a founding member of the ISSP. Finland became a member of the ISSP in 2000. Three institutions co-operate in conducting the ISSP surveys in Finland:

the Department of Sociology and Social Psychology at the University of Tampere, Statistics Finland and Finnish Social Science Data Archive.

The survey conducted in the year 2002 concentrated on attitudes about gender roles within families and work. Statements charted respondents' opinions on working mothers, housework, marriage, divorce, maternity leave and childcare. Respondents living with a spouse or a partner were asked about the division of domestic responsibilities, how many hours respondents and their spouses/partners spent on household work, and whether housework was equally shared. Questions were also asked about household decision making, financial issues, work-life balance and leisure time.

Since the aim of this thesis is to explore trends in attitudinal differences and differences in family and working life between the UK and Finland, in this chapter the British and Finnish data from the ISSP 2002 project on family, household and work attitudes was analysed.

Method

Participants

After obtaining access to the dataset, all data from participants who were not Finnish or British were removed for the purposes of further analysis. The analysis was performed on 3313 cases. The number of participants from the two countries and the distribution of the sexes are shown in Table 1.

The sampling was conducted differently in the two countries. In the UK, a random sampling was used whereby addresses were selected with equal probability in a stratified clustered design. The ISSP survey was completed independently by each participant after a face-to-face interview on unrelated social survey. The interviewer collected completed surveys. In Finland, the ISSP surveys were sent out by post. The Finnish participants were selected by a systematic random sampling design.

Table 1.

The sex and nationality distribution of the participants

UK		Finland	
Men	Women	Men	Women
852	1108	608	745
1960		1353	

Questionnaire

Most questions were responded to on a likert-type scale anchored by 1(strongly agree) and 5 (strongly disagree). Participants were also given the option not to answer individual items that they deemed as either a) non-applicable or too private (coded as 8), or b) too difficult to answer (coded as 9). For each analysis described here, the participants whose answer to the item in question was coded as either 8 or 9 were excluded from that particular analysis.

It should be noted that, in contrast to most survey research, the ISSP survey coded agreement with a statement with a lower score and disagreement with a higher score. The items relevant to the present analysis are given in the result section.

Results

Mothers' work status

In the first stage of analysis only female respondents with children living at home were included as their current work status was explored. These mothers were sub-divided into two groups: women whose youngest child was under school-aged[7] and women whose youngest child was still at school and aged 17 or less. Figures 1 and 2 illustrate the current work status of mothers in the two countries.

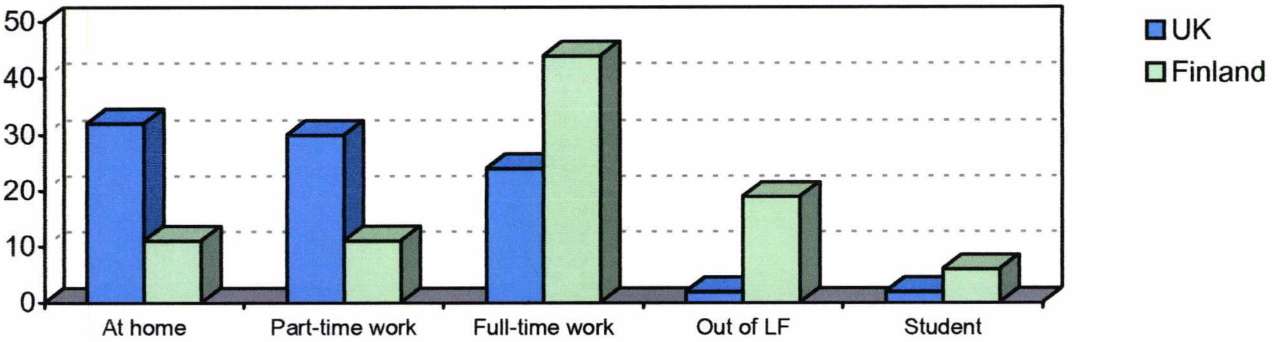

Figure 1. Work status of women whose youngest child is below school aged. Out of LF = Out of labour force.

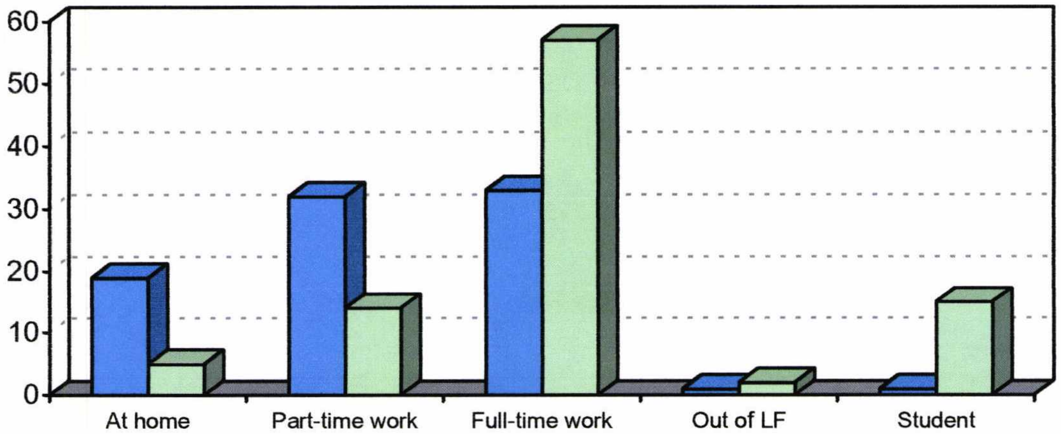

Figure 2. Work status of women whose youngest child is school aged. Out of LF = Out of labour force

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[7] Although Finnish children only start school at seven, the mothers whose youngest child was under five were included in the first group in Finland also in order to provide an accurate comparison. This was deemed appropriate because most Finnish children attend kindergarten between the ages four and six.

The figures of mothers' employment among the current sample were compared to national statistics. It was apparent that among the current British sample fewer women work part-time than reported by national statistics (Office for National Statistics, 2004), according to which 44% of British women work part-time. Similarly, part-time work was less common among the current Finnish sample than the Finnish national statistics report (in 2004, 18% of Finnish women were reported to work part-time).

Next, a 2 (Gender: male, female) x 2 (Nationality: Finnish, British) between participants ANOVA was conducted with the number of hours worked (at a paid job) per week as the dependent variable. There was a significant main effect of sex as men worked more hours than women, F (1, 1788) = 235.72, $p < .0001$, $\eta^2 = .12$, $M_{\text{men}} = 42.95$, $M_{\text{women}} = 34.56$. There was also a significant interaction between nationality and sex, F (1, 1788) = 35.12, $p < .0001$, $\eta^2 = .02$. This interaction was due to a large difference between the hours British men worked in comparison to British women (45 vs. 33). In contrast, the sex difference among the Finnish sample was notably smaller, as Finnish men worked on average 41 hours per week and Finnish women 36 hours per week. The interaction is illustrated in Figure 3.

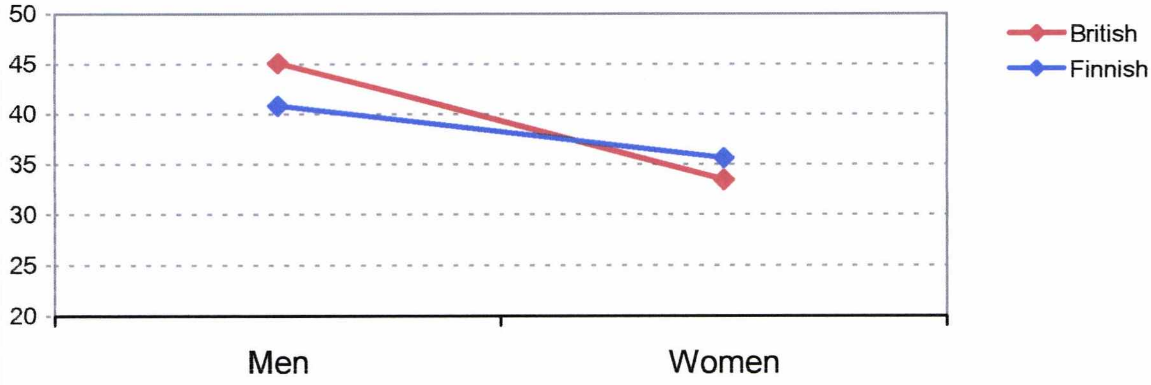

Figure 3. Men and women's working hours in the UK and Finland

Attitudes to women's employment

There were no significant national differences in views about whether married women should work before they have children or after their children have left home. In Finland over 95 per cent of respondents thought that women should work full-time in both cases. In the UK most people thought the same, but 10% thought that married women should only work part-time before having children and 23% thought that women should only work part-time after all their children have left home.

However, country differences in attitudes towards women's work emerged when asked whether women should work when their children are young. The British respondents were more likely than the Finnish to say that women should not work at all while their youngest child is pre-school aged and that women should only work part-time when their youngest child is at school. Figures 4 (youngest under school aged) and 5 (youngest school aged) illustrate these responses.

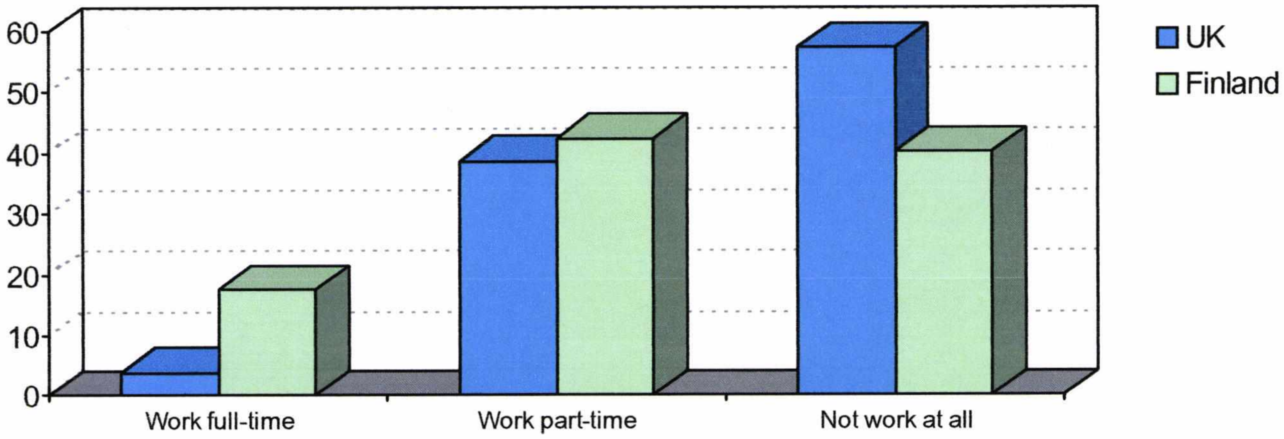

Figure 4. How much should a mother work when her youngest child is under school aged?

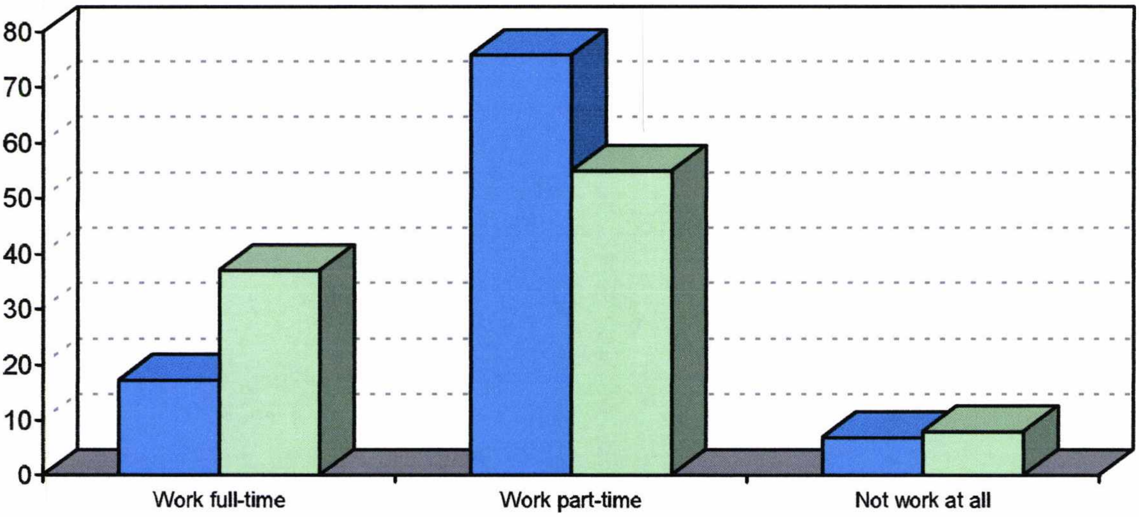

Figure 5. How much should a mother work when her youngest child is school aged?

A 2 (Gender: male, female) x 2 (Nationality: Finnish, British) between participants MANOVA was carried out with attitudes towards women's work as dependent variables. With the use of Wilks' criterion, the combined DVs were significantly affected by sex, $F(1, 2771) = 16.27$, $p <.0001$, $\eta^2 = .04$, and nationality $F(1, 2771) = 27.06$, $p <.0001$ $\eta^2 = .06$. The significant main effects of age and sex on each of the dependent variables are displayed in Table 2.

Family Roles

A 2 (Gender: male, female) x 2 (Nationality: Finnish, British) between participants MANOVA was carried out with attitudes towards family roles as dependent variables. With the use of Wilks' criterion, the combined DVs were significantly affected by sex, $F(1, 2887) = 18.94$, $p <.0001$, $\eta^2 = .03$, and nationality $F(1, 2887) = 63.42$, $p <.0001$ $\eta^2 = .08$. The significant main effects of age and sex on each of the dependent variables are displayed in Table 3. There were no significant interaction effects of sex and nationality.

Table 2.

Significant main effects of sex and nationality on attitudes towards women's employment (note that lower score indicates greater agreement with the statements)

	Means		*F*(df)	*p*	*Partial* η^2
Mum's employment causes family life to suffer					
Nationality	3.09_{UK}	3.52_{Finland}	92.63 (1, 2777)	<.0001	.03
Work is best for women's independence					
Nationality	2.59_{UK}	2.78_{Finland}	16.67 (1, 2777)	<.0001	.01
Working mum can have as warm relationship with their child as a non-working mum					
Sex	2.69_{men}	2.29_{women}	73.56 (1, 2777)	<.0001	.03
Pre-school child suffers from mother's employment					
Sex	2.93_{men}	3.25_{women}	52.22 (1, 2777)	<.0001	.02

Table 3.

Significant main effects of sex and nationality on attitudes towards family roles (note that lower score indicates greater agreement with the statements)

	Means		*F*(df)	*p*	*Partial* η^2
Men should do a larger share of housework than they do now					
Sex	2.41_{men}	2.27_{women}	56.27(1,2777)	<.0001	.03
Nationality	2.38_{UK}	2.20_{Finland}	31.24 (1, 2777)	<.0001	.01
Men should do a larger share of childcare than they do now					
Sex	2.35_{men}	2.15_{women}	44.10 (1, 2777)	<.0001	.02
Nationality	2.36_{UK}	2.24_{Finland}	52.05 (1, 2777)	<.0001	.02
Men's job is work, women's household					
Sex	3.54_{men}	3.81_{women}	43.75 (1, 2777)	<.0001	.02
Nationality	3.56_{UK}	3.76_{Finland}	18.1 (1, 2777)	<.0001	.01
A job is alright, but what women really want is home and kids					
Nationality	3.31_{UK}	2.72_{Finland}	200.96 (1, 2777)	<.0001	.08
Sex	2.93_{men}	3.1_{women}	16.63 (1, 2777)	<.0001	.01

Participants were also asked about who makes most decisions about children's upbringing in their families. In both countries approximately a quarter of the women sampled said that they make most of the decisions regarding their children's upbringing, while over half said that the mother and the father make all such decisions together (50% in Finland, 64% in the UK). The Finns were more likely than the British to say that sometimes the decisions are made by the mother, sometimes by the father (23% in Finland, 11% in the UK).

A 2 (Gender: male, female) x 2 (Nationality: Finnish, British) between participants ANOVA was carried out with the number of hours per week spent on household tasks as the dependent variable. There was a significant main effect of sex as in both countries women reported significantly more hours than men, $F(1, 1832) = 257.95$, $p <.0001$, $\eta^2 = .12$, $M_{\text{men}} = 7.14$, $M_{\text{women}} = 12.47$. There was no significant main effect of nationality. Among women, the number of hours spent on housework was negatively correlated with number of hours spent in paid employment ($r = -.12$, $p <.01$). Among men, this correlation was not significant ($r = -.03$, $p <$.ns.)

Income within families

Most women in both countries reported their partners to earn much more or somewhat more than they do (64.23% in the UK and 65.21% in Finland). In addition, 7.5% of the British and 2.5% of the Finnish women sampled reported that they had no personal income. Only 12% of the British women and 20% of the Finnish women reported to earn as much as their partners, while approximately 10% of women in both countries said that they earn more than their partner.

Attitudes towards maternity and parental payments

A 2 (Gender: male, female) x 2 (Nationality: Finnish, British) between participants MANOVA was conducted with attitudes towards maternity and parental payments. With the use of Wilks' criterion, the combined DVs were significantly affected by nationality, $F(1, 3101) = 84.83$, $p <.0001$, $\eta^2 = .04$. Finnish participants agreed significantly more than the British with the view that "Working mothers should be entitled to a paid maternity leave", $F(1, 3102) = 126.33$, $p <.0001$, $\eta^2 = .04$, and that "Working parents should receive financial benefits", $F(1, 3102) = 119.66$, $p <.0001$, $\eta^2 = .04$.

Attitudes towards marriage and children

A 2 (Gender: male, female) x 2 (Nationality: Finnish, British) between participants MANOVA was carried out with attitudes towards marriage and children as dependent variables. With the use of Wilks' criterion, the combined DVs were significantly affected by sex, $F(1, 2568) = 31.15$, $p <.0001$, $\eta^2 = .09$, and nationality $F(1, 2568) = 121.33$, $p <.0001$ $\eta^2 = .27$. The significant main effects of age and sex on each of the dependent variables are displayed in Table 4. There were no significant interaction effects.

Table 4.

Significant main effects of sex and nationality on attitudes towards marriage and children (note that lower score indicates greater agreement with the statements)

	Means		*F* (df)	*p*	Partial η^2
Married people are generally happier					
Sex	2.94_{men}	3.33_{women}	81.63 (1, 2575)	<.0001	.03
Bad marriage is better than no marriage at all					
Sex	4.24_{men}	4.43_{women}	35.28 (1, 2575)	<.0001	.01
If people want kids, it is better that they're married					
Sex	2.67_{men}	2.86_{women}	13.35 (1, 2575)	<.0001	.01
Single parents can raise children just as well as married couples					
Nationality	3.05_{UK}	3.27_{Finland}	22.49 (1, 2575)	<.0001	.01
Sex	3.44_{men}	2.88_{women}	149.27 (1, 2575)	<.0001	.06
People without kids lead empty lives					
Nationality	3.55_{UK}	2.48_{Finland}	584.12 (1, 2575)	<.0001	.19
Sex	2.89_{men}	3.14_{women}	31.19 (1, 2575)	<.0001	.02

Discussion

The current analysis of the ISSP 2002 data for the survey 'Family and Working Lives' set out to establish how Finnish and British adults differ from one another in their views about family and gender roles. Establishing what the basic national attitudinal differences are is crucial in order to develop hypotheses for the subsequent empirical chapters in the thesis. As the data set used in the secondary analysis was large (N = 3313), the results obtained can be relied on with some confidence when forming hypothesis about the effect of nationality in the consequent empirical studies.

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The comparison of work patterns of British and Finnish mothers demonstrated that, as expected based on national statistics, working full-time was more common for mothers in Finland than it was in the UK. Another important national difference was that while in both countries around 30% of mothers of younger children were not currently working, among the British sample most of these women labelled themselves as 'housewives' while in Finland the category 'out of labour force' was customarily given.

This national difference is likely to be a consequence of Finland's more family-friendly employment policies. The Finnish mothers are paid, by the state, to look after their children at home while their children are young, and are also guaranteed their old job back independent on how long they are on leave (up to three years). Therefore, it is likely that the Finnish mothers in the sample fully intend to return to full-time work when their children are older. In comparison, after the initial paid maternity leave, the British mothers who decide to look after young children at home rely solely on their partners' income, and have no guarantee of being able to return to the job they had before childbirth.

A key finding of the present study relates to participants' perceptions of how much mothers should ideally work when their children are below school-age and when their youngest child is at school. Among both national samples the discrepancy between the ideals and the work patterns of current mothers was striking. The disparity between the ideals and reality was even larger among the Finnish sample than it was among the British as, for example, over 80% of the Finnish participants felt that mothers of preschoolers should not work full-time when in fact nearly half of the mothers sampled reported to do so.

Approximately half of the Finnish participants thought that mothers should ideally work part-time, when only approximately 10% of Finnish mothers in the sample actually reported to do so. Incidentally, this figure is much lower than the percentage of all Finnish women currently working part-time, which stands at around 20% (Eurostat, 2005). This disparity in part-time working between the present sample and the official Finnish figures could be due to most people working on part-time basis in Finland being either students or people nearing retirement. Both of these groups were probably excluded from the present analyses as they are unlikely to have had children under the age of 17 living with them.

The found discrepancy between the ideal and reality has important implication for Finnish family policies in particular. The social structure of Finland is based on dual-earner families, and the childcare policies have been designed to enable mothers' full-time work. Finnish women expect, and are expected by others, to obtain education and careers just are men, and families depend on two incomes for their desired lifestyles. As both parents normally return from work around 5pm, it is normative for Finnish school aged children (seven and above) to let themselves in after school, make a snack, do homework, play with friends and travel to hobbies independently.

The present findings indicate that the customary arrangement whereby both parents work and children have a lot of 'self-sufficient' time is not deemed desirable by a large proportion of Finnish adults. That half of the current sample felt that mothers of school-aged children should only work part-time implies that these Finns may view the British norm of mothers picking children up from school and overseeing their free-time as a more desirable option. If this is indeed the case, the ‘family-friendliness’ of the Finnish policies falls under scrutiny as it could be argued that Finnish mothers do not work full-time because they have been ‘liberated’ to do so, but instead because they are expected to do so, and because their income is crucial for their family.

The examination of attitudes towards women’s work showed that the British were more negative than the Finns about the effect of mothers’ work on family life, but also agreed more than the Finns that “Working is best for women’s independence”. However, both of these findings are likely to reflect the fact that women’s employment is viewed more matter-of-factly by the Finns, who therefore do not view it as a factor that would affect either families’ well-being or women’s independence. Hence, it is unlikely that these effects of nationality echo a crucially meaningful difference in attitudes but merely differences in what is perceived as normative. These results may also be, to a large extent, attributable to the long-hours work culture in then UK. Working full-time implies much longer hours in the UK than it does in Finland where working hours are controlled by the EU Working Time directive.

Present study supports the previous research’s finding of men being, in general, more traditional in their gender attitudes than are women. Among the current sample, men were more likely than women to think that children suffer from mothers’ employment and that men should be chiefly responsible for earning. In addition, they were less likely than women to think that men should do more childcare and housework than they currently do. However, the most striking gender effects emerged in attitudes towards marriage and children as men expressed notably more traditional views than did women. For example, men were highly sceptical about single people's ability to raise children, thought that people without kids lead empty lives, and agreed with the idea of married people being happier than unmarried people.

These findings are likely to reflect the hypotheses of previous research and theory (e.g. Glick & Fiske, 1996), which have argued that the gender difference in traditionality is due to men currently holding more power in society than do women. Therefore, supporting traditionality suits them as a change towards greater gender equality implies graver losses for men than it does for women. The ideas of nuclear family, marriage and the man as a provider all support the current status quo of the two sexes, and hence the gender effects found here are not surprising. The gender difference in attitudes towards single parents' ability to raise children is likely to be due to a much greater proportion of single-parent families consisting of a mother rather than a father and children. Therefore, for women but not for men, scepticism towards single parents would be a form of self-criticism that they are unlikely to be willing to express.

Peculiar nationality differences emerged in the analyses of traditional family attitudes as the Finns agreed significantly more than the British with the items “A job is alright but what women really want is home and children” and “People without children lead empty lives”, and disagreed significantly more with the item “Single people can raise children just as well as married couples”. The peculiarity of these nationality effects is further highlighted by Finns agreeing more than the British with the idea that men should do more housework and childcare, and disagreeing more than the British with the item "Men's job is work, women's household".

The reason behind these inconsistent nationality effects could be that the items tap into separate attitudes. The latter items, on which the Finns show less traditional views, may be related to the dual-career ideology. Because the Finns view women's full-time work as a norm, they think that men should contribute more to household work, and that for them the idea of men being chiefly responsible for earning and women for household work is simply unrealistic. On the other hand, the items on which the Finns displayed greater traditionality may be seen as reflective of conventional family values and a belief in innate differences between men and women. Basically, it may be that despite viewing women's work as normative, the Finns hold the values of nuclear family and the nurturing nature of women in a greater esteem than do the British.

Conclusions

The present study sought to compare the gender attitudes of British and Finnish adults in order to discover any significant and consistent nationality differences. Albeit demonstrating some notable differences between the attitudes of the two nationalities, the present study was unsuccessful in its attempt to establish that one of the two would be consistently more traditional or stereotypical in its attitudes than the other. Indeed, the present findings seemed to indicate that while the Finns viewed women's work normative and consequently felt that men should do more household tasks, they also demonstrated greater belief in the importance of traditional family values and women's innate nurturance.

In contrast, the present study was successful in replicating the previous findings that have shown men to be more traditional in their gender attitudes than are women. In line with previous research and theory, this gender effect was attributed to men 'loosing' more than women as a result of increasing gender equality. An important finding among both sexes and nationalities was the discrepancy between the ideals and reality in mother's employment. The mothers in the current sample reported to work either full-time or part-time much more frequently that was deemed desirable. That the discrepancy between reality and ideal was even larger among the Finnish sample than the British, could be taken as a sign that many Finnish mothers work full-time not because they want to but rather because they feel that it is what's expected and needed from them.

Chapter 5: Exploring children and adolescents' gender-related beliefs and stereotypes

This chapter presents the second empirical study of the thesis. The results of Study One demonstrated inconsistency in the nationality effects on attitudes towards family, work and gender roles among British and Finnish adults. Hence, the present study sought to investigate similar attitudes among children and adolescents in the two countries. In order to examine the developmental trends in gender attitudes, four age groups were included in the sample. Study Two was an exploratory study that aimed to form a comprehensive view about 21st century children and adolescents' views on gender roles and stereotypes. More specifically, attitudes and stereotypes about academic ability, personality characteristics, occupational efficacy and family roles were investigated.

Research on gender attitudes: Trends, implications and influences

One of the aims of the thesis is to explore and compare the gender stereotypes held by Finnish and English children and adolescents. The gender stereotypes held by children and adolescents is an under-researched area in psychology. This is surprising when one considers the fact that current gender stereotypes will significantly affect the futures of the younger generations. Indeed, since the 1990s concern has been expressed about the effects that restrictive gender stereotyping will have on children's educational goals, career choices and self-concepts (Burt & Scott, 2002).

Such effects include not only restrictions on individuals' opportunities and aspirations, but also broader issues of occupational gender segregation, gender pay gap and skills shortages in the labour market. Bearing these societal concerns in mind, Burt & Scott (2002) pointed out that when considering how important adolescent attitudes are in shaping their futures, it is surprising how little research there has been into gender role attitudes of young people.

It should be noted that there has been some research examining developmental trends in gender stereotypes, and social psychological research has explored gender stereotyping within individual societies (Ambady, Shih, Kim and Pittinsky, 2001; Powlishta, 1995; Signorella & Liben, 1985). Following this research it has generally become accepted that boys hold more stereotypical attitudes than girls (Archer, 1984; Garrett, Ein & Tremaine 1977; Payne, 1981, Urberg, 1982), and that flexibility of gender-related attitudes increases with age (Garrett et al., 1977; Signorella & Liben, 1985). However, this branch of research has a number of limitations. Firstly, developmental studies have frequently confused measures of stereotype knowledge with actual stereotyping (See Chapter 1). Secondly, developmental studies into gender-related attitudes have often ignored the impact of social influences (Lutz & Ruble, 1995).

Research suggests there may be societal differences in the gender stereotypes held by adults as, for example, traditional gender roles and endorsement of sex-stereotypes have been linked to lesser democracy and lower levels of industrialisation (Hofstede, 2001). This finding could lead to a number of predictions regarding the gender stereotypes held by English and

Finnish children and adolescents. Given that both England and Finland are modern Western societies, it might be expected that English and Finnish children and adolescents will hold less gender stereotypical views compared with developing patriarchal societies.

Similarities between Finnish and English society could mean that children in these countries hold similar gender stereotypes. In both countries women vote, are employed and can lead independent lives. Legislation bans discrimination based on sex, and both boys and girls are required to attend school, and encouraged to obtain a high degree of education. However, despite such broad similarities, a closer inspection of the two countries suggests there may be some significant differences that could lead children in England and Finland to hold different gender stereotypes (see Chapter 3 for discussion on such differences). Specific differences were discovered in Chapter 4, where the two countries' responses to the ISSP survey on work and family attitudes were compared.

The ISSP data revealed significant differences between the attitudes of adults from the two countries. For example, it showed that the British participants were much more negative about the effects of mother's employment on the family well-being than were the Finnish. These findings were thought to reflect the fact that in Finland women's full-time employment is perceived more as a norm than it is in the UK (see Chapter 4). However, the analysis also indicated that the Finns hold traditional family values in higher esteem that do the British. For example, the Finns viewed people without children to lead empty lives and thought that single parents are less able to raise children than a nuclear family. Perhaps most significantly, the

Finns agreed with the sentence ‘A job is alright but what women really want is home and kids’ much more than did the British.

Therefore, it appears that cultural influences are an important determinant of gender attitudes in Finnish and English adults. The aim of the current research is to examine whether or not these societal differences are also found in children and adolescents. Furthermore, it is important to note that the ISSP study examined attitudes about the *roles* of the two sexes and did not include measures of actual gender stereotyping. Indeed, it seems that overall, international surveys such as the ISSP have tended to focus upon the attitudes on housework vs. earning and on overall indicators of gender equality (Hofstede, 1972, 2001).

Therefore the current research aims to explicitly examine the gender *attitudes* in Finland and England. In this study, the following aspects of gender stereotypes were examined: academic stereotypes, personality stereotypes, occupational stereotypes and family roles. The significance of each, as well as the previous research on these stereotypes, is discussed below.

Academic Ability: Stereotyping in spite of the contrary evidence?

As discussed in Chapter 1 (p. 22), widely held stereotypes tend to depict boys as more competent in maths and girls in languages. These views continue to be held despite the widely publicised finding that girls outperform boys in both maths and languages, and that this trend is observed across the different stages of schooling (Elwood & Murphy, 2002). Ambady et al. (2001) found that even very young children have some awareness of these stereotypes, which continue to be endorsed in adolescence when they are likely to influence important educational choices.

Ruble and Martin (1998) studied *actual* gender differences in academic performance. They found that in the UK girls outperform boys in spelling and overall linguistic skills across ages. Similarly, Finnish girls significantly outperform boys in literature and spelling throughout age groups (Lappalainen, 2003, in Opetushallitus, 2004). In relation to maths, Ruble and Martin (1998) found that until the age of 15, there was no gender gap in the understanding of mathematical concepts, a slight advantage to boys in problem-solving, and an advantage to girls on computational skills. Niemi (2001, in Opetushallitus, 2004) found that in Finland, primary school aged girls perform better than boys at maths. However, in Finland the gender difference is reversed by the end of compulsory schooling (Mattila, 2002 in Opetushallitus, 2004). As Heyman and Legare (2004) point out, stereotypes about mathematical ability are particularly interesting as girls on average outperform boys but boys are persistently viewed as superior in comparison. Consequently, during their schooling children may often face discrepancies between their stereotypes and actual observations.

Stereotypes show their pervasiveness in the way they influence self-perceptions. An extensive program of research by Eccles and colleagues has focused on differences in children and adolescents' perceptions of their academic competence, achievement, and on their educational choices (e.g., Eccles, 1992, 1994; Eccles, Barber, & Jozefowicz, 1999; Eccles & Lord, 1991; Eccles, Jacobs, & Harold, 1990; Yee & Eccles, 1988). This research has demonstrated that school-aged girls' perceptions of their competence, and their expectations for success in mathematics and other traditionally male subjects are significantly more negative than those of the same-age males (e.g., Eccles, Wigfield, Harold, & Blumenfeld, 1993; Eccles et al., 1999; Wigfield & Eccles, 1994). Also, females in the final years of their compulsory education and at early stages of university rate mathematics and physical sciences as less important, less useful and less interesting than their male peers (Eccles, 1994; Eccles et al., 1990).

The present study was designed to explore children and adolescents' attitudes towards these persistent stereotypes, as well as measuring their perceived self-efficacy in the same domains. Inclusion of both measures allowed participants to express their own beliefs about the stereotype separately from their perception of personal ability. Another point of interest was the extent to which the mechanisms of intergroup relations, and ingroup bias in particular, affect participants' opinions on who is better at maths versus literacy. Based on Powlishta's work (1995, see Ch. 2, p. 54), ingroup bias may well prove a more powerful force than gender stereotyping in determining who girls and boys will perceive as better at maths or literacy.

Gender roles and socialization influences within families

A trend evident in recent research is that attitudes toward childcare and housework are changing at very different pace (Cabrera et al., 2000). Men are increasingly likely to express egalitarian values toward the childcare responsibilities, but are much less willing to divide housework tasks in an egalitarian manner. Houston & Marks (2003) asked couples to estimate the proportion of housework partners performed and found that even in dual-career families mothers perform, on average, 60 per cent of housework tasks in comparison to 29 per cent performed by fathers. The differences were even bigger among families where mother either did not participate in the labour force or worked part-time.

Gender differences in attitudes often arise with respect to traditional family roles as men tend to express less egalitarian views than women (Burt & Scott, 2002). Attitudes towards equality in the labour market and marital equality tend to be similar for the two sexes (Cherlin & Walters, 1981; Mason & Lu, 1988), but men are more negative than women in their views about mother's role and the effect mother's employment has on children. This effect was also found in Study One of the present thesis. In his longitudinal research, Zuo (1997) found that egalitarianism among married men increased over time with younger men holding less traditional attitudes than the older. However, Zuo discovered that although men in his sample supported the idea of their wives working, they still wanted to earn more than their spouses, and were reluctant to give up their provider status in order to share housework and childcare duties.

In line with these findings are those of Burt and Scott (2002), who found that women and girls are less traditional in their gender roles than are men and boys, and that adolescents were generally less traditional than their parents. Consistent with Zuo's (1997) findings, Burt and Scott found that the conflict between men's egalitarian support for two-earner families and their desire to continue holding power within a family setting is also evident in the younger generation of British men.

Furthermore, Burt and Scott (2002) found that although adolescent girls were more likely than either of their parents to endorse egalitarian gender roles, adolescent boys were similar to their fathers and were disinclined to support any changes that threatened their dominant role as the breadwinner and authority figure within their future family. Similarly, a study by Equal Opportunities Commission (2001) showed that among their British sample, 82 per cent of girls compared to 64 per cent of boys disagreed with the sentence “A man’s job is to earn money; a woman’s job is to look after the home and family”. Not only did fewer boys than girls disagree with the sentence, but almost a quarter of boys actually agreed with it.

As discussed in Chapter 1 (p. 33), family socialization has a significant impact on how children and adolescents view family roles. For example, Thorn and Gilbert (1998) found that a father sharing housework with their wife was associated with increased role sharing expectations in sons. Similarly, Antill et al. (2003) found that performance of feminine household tasks differentiated egalitarian families from others, as it was evident that the less mother was responsible for housework, the more egalitarian their daughters were. Fan and Marini (2000) argued that mothers’ employment is one of the most important factors shifting offspring’s attitudes in a more egalitarian direction.

The present study sought to examine two aspects of gender roles within families. Firstly, the perception participants had about how different tasks, such as childcare, housework and earning, were divided within their own families was investigated. Secondly, their assumptions of how these same tasks will be divided once they had their own families were investigated. The examination of both, the perception of the current situation and the assumption about the future, allowed the present study to investigate the relationship between the two.

Personality stereotypes: Instrumentality vs. expressiveness

That men are generally viewed as possessing mostly instrumental qualities and women expressive qualities was discussed in depth in Chapter 1. Principally, instrumental qualities relate to agentic traits that on the positive dimension include ambitiousness, determination, success and independence. The negative side of instrumentality is related to aggressiveness, insensitivity, ruthlessness and egocentricity. Expressive qualities on the other hand include empathy, kindness, thoughtfulness and compassion on the positive dimension, and dependence, weakness, vulnerability and helplessness on the negative dimension.

As discussed in Chapter 1, even young children associate men with higher status (e.g. Glick & Hilt, 2000; Lockheed & Klein, 1985), and tend to associate men with strength and women with helplessness (Ruble &Martin, 1998). Overall, among adult samples women are perceived to have more positive personality characteristics than are men (Eagly & Mladinic, 1993; Fiske et al., 2002; Glick et al., 2004). This is due to men being attributed negative as well as positive traits associated with power while women are associated with highly likeable traits such as kindness and compassion that also reflect lesser power (Glick & Hilt, 2000).

Powlishta's (1995) found that ingroup bias, which is strong among pre-adolescent children, can hinder the measurement of personality stereotypes as children are eager to associate any positive qualities with their own sex, and any negative qualities with the other sex. Indeed, Powlishta found that girls argued 'strong' to be a feminine quality, and boys 'gentle' to be a masculine quality. Powlishta (1995) concluded that for children who are at the height of the developmental phase where other sex is deemed to have 'cooties', the need to evaluate own sex more positively than the other overrules the knowledge about sex stereotypes.

In the present study, personality stereotypes on expressive – instrumental dimension were examined. Firstly, the content of these stereotypes was of interest; namely what specific traits children and adolescents most eagerly link to men versus women. Secondly, the flexibility of personality stereotypes was measured by examining participants' tendency to link different traits to both sexes rather than to one exclusively. In accordance to previous research and theory (e.g. Liben & Bigler, 2002), it was expected that flexibility would increase with age. In order to minimise the effect of ingroup bias (Powlishta, 1995), only positive instrumental and expressive traits were included in the measurement.

Occupational attitudes: Stereotypes and aspirations

There are a number of theories concerning children's occupational and career development. These consider how children come to view some occupations as suitable for men or women only, and what information they base their own occupational aspirations on (see Chapter 1). The present study sought to explore some of the variables identified by these theories as being important in children's occupational and career development, namely occupational gender stereotypes, occupational self-efficacy and future aspirations in England and Finland.

Kohlberg's Cognitive Theory (1966) argued that children become more flexible in their attitudes about sex stereotypes of occupations as they become older. Gottfredson's theory of circumscription and compromise (1981, 1996) introduced four developmental stages of children's career development but these were related to individuals' personal choices only, not to their attitudes about occupational gender stereotypes (see Ch. 1, p. 27). However, Gottfredson (1996) argued that children's aspirations become more individualistic with age, and the significance of gender stereotypes lessens from middle childhood onwards. Therefore the two theories seem to agree that gender stereotyping of occupations lessens from infancy into adulthood.

So far, research has largely focused on young children's knowledge and beliefs regarding gender-typed occupations, rather than their self-perceptions of competence in different occupations (e.g., Gettys & Cann, 1981; Reid, 1995). For instance, Levy et al. (2000) found that even preschool children perceive differential competencies for men and women with reference to gender-types of occupations.

In a literature review of occupational stereotyping research, Helwig (1998) concluded that despite the increasing number of women in the workforce performing a great variety of occupations, children continue to view occupations in a gender stereotypical manner. He also found evidence to suggest that boys hold more stereotypical attitudes about occupations than girls although some studies have shown no sex difference in attitudes (e.g. Signorella & Liben 1985; Stockard & McGee, 1990). Helwig's literature review did not indicate any age trends as in some studies younger children were more stereotypical and in others the older.

Helwig's (1998) own longitudinal study found that boys, but not girls, became more occupationally stereotypical as they got older. At eleven, (third stage of Gottfredson's theory – emphasis on social value) girls started to shift toward male occupations when selecting an ideal occupation. Helwig (1998) explained this by arguing that as the value emphasis moves towards social values both sexes are more likely to select high-prestige 'male-jobs'. Helwig (1998) argued that the change in girls' attitudes is explained by them becoming increasingly aware of traditionally 'male' occupations with a higher social value in addition to those traditionally female occupations they were aware of at younger ages.

It is worth noting however that considerable changes have occurred in the distribution of men and women into different occupations during the past 15 years or so. Since Gottfredson's original theory (1981), her revision of the theory (1996), and also since Helwig's research (1998), many traditionally high-prestige male occupations have become either female dominated or neutral in their sex typing. For example, the occupations used as a key example of older girls aspiring to high prestige masculine occupations by Helwig – doctor, lawyer and vet – are now perceived as both high prestige and gender neutral (doctor and lawyer), or as high prestige feminine occupations (vet) (Equal Opportunities Commission, 2005).

Helwig (1998) found no overall sex differences when children were asked whether there were jobs suitable for only men or only women. However there was a clear age difference, as half of the youngest children (aged seven) said that there are some jobs suitable for only one of the sexes, while three quarters of the same children at age 11 said that there were no such occupations. Interestingly, a majority of boys who said there are no jobs for only one sex still chose a stereotypical job for themselves. This indicates that despite becoming more flexible about occupational sex roles with age, boys' personal choices remain gender-typical.

Although research has largely focussed on children's knowledge and beliefs regarding gender-typed occupations, some researchers have examined children's occupational efficacy beliefs. Research has shown that adolescent females express a higher degree of self-confidence in health-related and feminine gender-typed work positions (e.g., nursing, dental assistant, secretary; Eccles, 1994) while adolescent males express greater self-confidence in science-related and masculine gender-typed vocations (e.g., engineer, physician, chemist, pilot; Benbow, 1988; Benbow & Stanley, 1982; Eccles, 1994; Eccles et al., 1999). Levy et al. (2000) found that even preschool children perceive differential competencies for men and women with reference to gender-types of occupations. So far, research has largely focused on young children's knowledge and beliefs regarding gender-typed occupations, rather than their self-perceptions of competence in different occupations (e.g., Gettys & Cann, 1981; Reid, 1995).

The present study aimed to extend this research by examining gender stereotyping of occupations and participants' self-efficacy for occupations that could be labelled as feminine, masculine or neutral. Furthermore, the examination of self-efficacy and stereotyping enabled the exploration of how children and adolescents' occupational gender stereotypes may have changed since Gottfredson's (1996) and Helwig's (1998) studies as it was expected that many of the occupations perceived as masculine at the time of their research is no longer perceived as such. The examination of participants' favourite occupations was included in order to test Gottfredson's theory of circumscription and compromise among a 21st century sample.

Methodological Considerations

As stated earlier, a number of limitations hinder the developmental and social psychological research on gender attitude and stereotypes. Glick and Hilt (2000) argued that much of the research on gender-related attitudes has been compromised by conceptual and methodological confusion. Many prominent researchers in social as well as developmental psychology (e.g. Spence & Buckner, 2000) have requested greater care in defining and measuring gender-related constructs, which are commonly acknowledged to be more multidimensional and complex than previously thought (Glick & Hilt, 2000). The ambiguity of concepts and lack of unified measurements has hindered research in both social and developmental domains, but these problems have affected the two branches slightly differently (Glick & Hilt, 2000).

In social psychology, the absence of a good conceptual framework has resulted in a profusion of scales, tests and measures that are portrayed as measuring something similar when they actually tap distinct concepts (e.g. stereotype knowledge vs. stereotyping). In the developmental literature, a more limited number of measurements have been used but these have typically been overly focussed on cognitive variables and largely ignored general emotional evaluations of gender groups (Lutz & Ruble, 1995). This has meant that cognitive measures, such as stereotype knowledge, have often been taken as indices of gender prejudice (Glick & Hilt, 2000).

The confusion of stereotype knowledge with actual stereotyping is particularly problematic since gender stereotype knowledge is thought to increase with age, while the endorsement of stereotypes is assumed to decrease with age due to an increase in cognitive abilities such as perspective taking and hypothetical thinking (Signorella & Liben, 1985). Thus, stereotype knowledge cannot be taken as an indication of gender stereotyping. Indeed, one possible reason for inconsistent findings in the developmental literature regarding children's gender attitudes could be the lack of differentiation between measures of gender attitudes and gender stereotypes (Powlishta, 2000; Signorella & Liben, 1985)

A further methodological limitation of the developmental literature is the use of 'forced choice' responses in measuring children's gender attitudes (e.g. Signorella & Liben, 1985). This typically involves asking children to assign given stimuli (e.g. occupations, traits, activities) to either men or women. The forced choice procedure is problematic as it maximises the likelihood of eliciting stereotyped responses, which also tends to increase with age as children's knowledge of societal stereotypes grows (Albert & Porter, 1983; Coker, 1984; Leahy & Shirk, 1984).

In contrast, when children's own attitudes as opposed to stereotype knowledge are examined, the measurement must allow for the multidimensionality of their attitudes (Signorella & Liben, 1985, p. 3). The measurements can be made more flexible by, for example, offering the option 'both' to questions about stereotypes such as "Who does..." or "Who is..."

Signorella and Liben (1985) note that results of studies offering such option are consistent with the age-related assumption of the cognitive theories that predict an increase in stereotyping up to approximately seven years of age followed by a steady increase thereafter (Archer, 1984; Carter & Patterson, 1982; Urberg, 1982).

The Present Research

The main purpose of the study presented in this chapter was to obtain a comprehensive view of children and adolescents' gender-related attitudes and stereotypes in England and Finland. In order to acquire as comprehensive a model as possible, four age groups were included in the study: 8, 11, 14 and 16 year olds. As such a wide age span has rarely been included in gender research among children the present study should provide an important insight into the development of gender-related attitudes and stereotyping.

Previous research has found that children do not acquire full understanding of gender consistency and constancy until the age of six or seven (see Ch. 2, p. 49). Also, cognitive theories of gender-role development argue that gender stereotyping peaks at the same age (Signorella & Liben, 1985). Therefore eight-year olds were chosen as the youngest age group, since at this age children fully understand the permanent nature of being either a boy or a girl, but are no longer at the peak of their most inflexible gender stereotyping stage either.

Eleven-year olds were chosen as they are, in both countries, at the end of their primary schooling and starting to consider choices for secondary education. Also, they are nearing the transition to adolescence during which time gender-related attitudes change markedly and attitudes became influenced by sexual attraction to the opposite sex (Glick & Fiske, 1998). Therefore, the 11-year olds in this sample represent older children before they turn into teenagers.

The next age group included, 14-year olds, are still in their mid-teens but chronologically closer to being a child than an adult, while the oldest age group, 16-year olds, are nearing the transition to adulthood. Sixteen-year olds are in the end of their compulsory schooling and are already making decisions that will have implications for the rest of their lives. The inclusion of these four age groups is hoped to enable an inspection of developmental trends in relation to the aforementioned aspects of gender stereotyping. The inclusion of two countries will make any developmental findings more generalisable.

As the present study included measured number of stereotypes, the methodological issues considered above were relevant in designing the measures used. For example, in order to avoid the caveats of a purely fixed-response methodology, both free- and fixed-response methodologies were employed. In the trait stereotyping task, the participants were given three options ('Men only', 'Women only', and 'Both') but fixed response methodology was used when participants were asked to nominate the most desirable occupation out of the possibilities given.

Due to the large sample size and the number of variables included in the study, the results will be presented in four sub-sections which will consider the following:

1. Academic attitudes: Gender stereotyping, perceptions of ability and ingroup bias
2. Trait stereotyping of desirable expressive and instrumental qualities
3. Occupational attitudes: Gender stereotyping, self-efficacy and aspirations
4. Family roles and division of housework and childcare: Future assumptions and perceptions of current division of labour

Method

Participants

The participants in this study were 1856 English and Finnish children and adolescents. The study included four age groups: seven to eight year olds, 10 to 11 year olds, 13 to 14 year olds, and 15 to 16 year olds. The mean ages were 96.4 months (8.03 years), 133.9 months (11.16 years), 164.75 months (13.73 years), and 188.05 months (15.67 years) for the four age groups, respectively. In the subsequent discussion these age groups will be referred to as 8 -, 11-, 14- and 16- year olds. The distribution of girls and boys within each age group and within the two nationalities is shown in Table 1.

The English participants were recruited from three primary and three secondary schools in Kent, and the Finnish participants from three primary and five secondary schools located in suburbs near the Finnish capital city Helsinki.

Table 1.

The age, sex and nationality distribution of the participants

	English		Finnish		
	Boys	Girls	Boys	Girls	Total
8 year olds	108	92	100	110	410
11 year olds	98	102	99	122	421
14 year olds	111	115	167	176	569
16 year olds	87	106	123	140	456
Total	819		1037		**1856**

Procedure

In line with ethical requirements, parental permission was sought from the parents or guardians of participants. Parents of all pupils from the two age groups in participating schools were sent an information letter that explained the purpose and the procedure of the study. They were asked to send back an 'opt-out' slip if they did not want their child to participate in the study. No slips were returned.

Questionnaires were completed during class time in schools. The younger children completed the questionnaires as a class activity with the teacher explaining each task with an aid of an overhead projector. Teaching assistants helped any students who had difficulties with writing down their answers. On the title page of the questionnaire the students wrote the name of their school and their date of birth.

The questionnaires used in Finland and the UK included the same measures. The questionnaires were originally designed in English. The translation to Finnish was completed by the researcher and back-translated by an independent person proficient in both languages. Unless otherwise stated the participants responded to all measures on a five-point Likert-style scale. The items used are shown in Appendix 1. The questionnaire[8] included the following measures:

Attitudes towards paid work The items measuring attitudes towards future employment were: “I'll have a job”, “I'll earn a lot of money” and “My job will be important to me”. Analysis revealed that these items did not form a reliable scale and so were treated as separate items in the consequent analysis.

Own competence at school This was measured by four items: “I am good at school”, “I am good at literacy”, “I am good at science”, and “I am good at maths”.

Who is better at school, girls or boys? Four items represented the belief that boys are better than girls at 1) maths, 2) literacy, 3) science, and 4) at school overall, while the other four argued girls to be better than boys. The items “Girls are better than boys at literacy” and “Boys are better than girls at maths” were used to measure academic stereotypes, while the scores from items “Boys are better at school than girls” (reverse scored for girls) and “Girls are better at school than boys” (reverse scored for boys) were combined to form an academic ingroup bias scale ($\alpha = .77$ for both boys and girls).

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[8] For the youngest two age groups different questionnaires were used for boys and girls, as it was felt to be beneficial to keep the wording of questions and instructions as simple as possible. This meant that questions including words such as wife, husband, mother and father were phrased differently for boys and girls. For example, item “I will do more housework than my wife” in boys' questionnaires read “I will do more housework than my husband” in girls' questionnaires, and “I will do more housework than my partner” in older children's questionnaires.

Gender stereotypical trait attribution Participants were presented with 12 positive attributes of which 6 were instrumental (stereotypically masculine) and 6 expressive (stereotypically feminine) (Spence & Helmreich, 1978). The instrumental traits used were confident, brave, leader-like, assertive, persistent and ambitious. The expressive traits were empathic, unselfish, loving, gentle, polite and emotional[9]. The participants were asked to link the attributes either to a picture of a man, to a picture of a woman, or to a picture showing both, in accordance to who they thought the attribute best described. The number of traits assigned to "both" was used as a measure of measurement of flexibility in gender attitudes relating to personality.

Views about different occupations Participants were presented with 18 occupations written in separate boxes and asked to indicate, by circling or crossing over boxes, which jobs they thought they *could or could not do* when they are adults. This measure was of interest as girls and boys' perceived self-efficacy for different occupations may portray children's view of occupational boundaries founded on sex. It was also of interest to see whether girls' efficacy for "male occupations" was higher than boys' efficacy for "female occupations", as speculated by Helwig (1998).

Six of the occupations were stereotypically male (builder, mechanic, police, prime minister[10], accountant, and scientist), six female (primary teacher, nurse, childminder, cleaner, beautician, and secretary), and six neutral (vet, lawyer, doctor, journalist, businessman or woman, and actor / actress). The occupations were selected based on previous research on occupational stereotypes in both countries (Helwig, 1995; Equal Opportunities Commission, 2005), and on gender statistics from various national bodies, such as the Metropolitan Police and Royal College of Veterinary Surgeons[11].

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[9] As some of the traits used in this measure were expected to be too abstract for younger children, they were 'translated' to simpler language. Hence, assertive became "Stands up for themselves"; persistent "Doesn't give up"; ambitious "Wants to be best at things" and empathic "Understands others' feelings".

[10] In the Finnish questionnaire the occupation of Prime Minister was replaced by President

Next, participants were asked to decide whether any of the 18 occupations listed could be performed by men or women only. If yes, they were asked to write down the occupations they felt to be suitable for men only or for women only. Furthermore, participants were asked to nominate the occupation, out of the 18 presented, that they would most like to do when they were adults.

The division of childcare and household tasks now Seventeen tasks that are generally done in all families with children were displayed in separate boxes. Participants were asked to indicate who predominantly does each of the 17 given tasks in their family by marking the boxes with M (mother), F (father), B (both), C (children), or S (someone else). There were eight childcare tasks and eight housework tasks[12]. In addition participants were presented with a provision task 'Earning money'.

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[11] As the distribution of men and women into different occupations is slightly different in Finland than it is in the UK, and as it was deemed important to use the same occupations in the two countries, the occupations selected may not be the most typical 'male' and 'female' occupations in the two countries.

[12] Childcare tasks: Playing with children, helping with different activities, putting children to bed, disciplining children, taking children to hobbies or friends, taking children to school, picking children up from school, and explaining things to children. Housework tasks: Gardening, washing up or using the dishwasher, laundry, ironing, cooking, cleaning, DIY, and car maintenance.

The division of childcare and household tasks in the future First, participants were asked to circle the option they felt best answered the questions "If I have a family, who will do housework…" and "If I have children, who will do childcare…" The options given were "Only me", "Mostly me", "Me and partner equally", "Mostly partner" and "Only partner".

Next they were presented with the same items as in the "division of housework and childcare" measures but were instructed to think about who will perform the 17 tasks when they are adults and have a family of their own.

Socialization variables Participants were asked whether or not their own parents worked at a paid job. If yes, they were asked what their parents' occupation were. The responses to the last two questions appeared unreliable however, as many 8-year olds wrote "don't know", and even among the older age groups answers such as "she works at a school" were common. Therefore, for each participant it was only coded whether their father and mother were employed outside the home.

Missing data Some participants had left items unanswered but there were no, however, any questionnaires with five per cent or more of the answers missing. Hence no questionnaires were discarded but the cases with missing values were excluded from the analysis of the specific measures.

Results and Discussion

Academic attitudes: Gender stereotyping, perceptions of ability and ingroup bias

The means, standard deviations, scale ranges and correlations among variables are presented in Table 2. Age was coded as a discrete variable (1 = 8-year olds, 2 = 11-year olds, 3 = 13-year olds and 4 = 16-year olds) and sex as a dichotomous variable (1 = boy, 2 = girl). Therefore the correlations with these are point-biserial correlations. They are identical to Pearson's Product Moment coefficient. Because these two variables were evenly distributed it was acceptable to include them in regression analyses as if they were continuous variables. Throughout the analyses it was decided to use age group (1-4) as the independent variable instead of age in months. Although age in months would have been a continuous variable, usage of it would have meant that differences between four age groups, selected based on previous theory and research, could not have been compared with each other.

As Table 2 demonstrates, the four self-efficacy variables were significantly correlated. There was also a significant relationship between age and ingroup bias, and between stereotype and ingroup bias. Consistent with previous research (e.g. Glick & Hilt, 2000), the correlation between age and ingroup bias was negative, implying that younger children express stronger ingroup bias. However, the hypothesised negative association between age and stereotyping was weak.

Nationality was not significantly correlated with other variables although the coefficients implied that the Finns expressed slightly higher self-efficacy, and slightly more stereotyping and ingroup bias. Sex was associated with academic self-efficacy, stereotyped beliefs and ingroup bias. As expected, girls expressed higher efficacy in literacy and boys in maths. Ingroup bias effected the perception of academic stereotypes as boys agreed more than girls with the statement that boys are better at maths, and girls agreed more than boys with the statement that girls are better at literacy. Consistent with predictions of Glick and Hilt (2000), girls expressed slightly stronger ingroup bias than did boys. However, as girls generally do outperform boys at school, this gender difference could just reflect an accurate perception of gender differences in performance.

Table 2.
Means, standard deviations and inter-correlations between variables.

	M (range)	SD	1	2	3	4	5	6	7	8	9
1.Age	2.58 (1-4)	1.09	1								
2. Sex	1.52 (1-2)	.50	.03	1							
3. Nationality	1.56 (1-2)	.50	.04*	.02	1						
4. I'm good at school	3.8 (1-5)	.92	-.09***	.06**	.04	1					
5. I'm good at maths	3.66 (1-5)	1.21	-.20***	-.19***	.06*	.45***	1				
6. I'm good at literacy	3.65 (1-5)	1.03	-.01	.13	.06*	.42***	.19***	1			
7. I'm good at science	3.49 (1-5)	1.42	-.05*	.03	.07*	.33***	.20***	.20***	1		
8. Boys are better at maths	3.02 (1-5)	1.07	-.05*	-.31***	.06*	.03	.13***	.02	.05*	1	
9. Girls are better at literacy	3.17 (1-5)	1.05	-.003	.21***	.13***	.07**	.03	.05*	.01	-.02	1
10. Ingroup bias	3.12 (1-5)	.87	-.31***	.08**	.08**	.13***	.13***	.11***	.15***	.25***	.22***

Paired samples t-test showed a significant difference between the agreement with the stereotype-consistent statement "Boys are better than girls at maths" ($M = 3.2$) and the counter-stereotypical statement "Girls are better than boys at maths" ($M = 2.9$), $t(1840) = 4.04$, $p <.0001$. The same pattern was found when comparing the items "Girls are better than boys at literacy" ($M =3.2$) and "Boys are better at literacy than girls" ($M =2.6$), $t(1840) = -13.37$, $p <.0001$.

The next stage of analysis was to explore which variables predicted the dependent variable "I'm good at school". Sequential regression was used to determine whether the addition of self-efficacy variables "I'm good at maths", "I'm good at literacy", and "I'm good at science" improved prediction of the dependent variable "I'm good at school" beyond that offered by independent variables sex, age and nationality. The results of the regression analyses are illustrated in Table 3. R was significantly different from zero at the end of both steps, and after the second step, $R = 60$, $F(3, 1760) = 318.70$, $p <.0001$.

In the first model, the dependent variable was predicted by all three independent variables: overall self-efficacy was higher among girls, among younger participants and among the Finnish. The second model however revealed that the strongest predictor of "I'm good at school" was self-efficacy in maths, followed by self-efficacy in literacy and in science. After the self-efficacy variables were entered into the model, the effects of age and nationality became non-significant.

Table 3.

Predicting overall self-efficacy at school

I'm good at school							
Model	*B*	*β*	*T*	*R*	R^2	Sig. *F* change	*DFs*
1.							
Sex	.110	.06***	2.54				
Age	-.08	-.10*	-4.03				
Nationality	.113	.06*	2.58				
				0.13	.02	.000	3, 1763
2.							
Sex	.186	.101***	5.146				
Age	-.003	-.001	-.155				
Nationality	-.002	-.001	-.064				
I'm good at literacy	.262	.292***	14.657				
I'm good at maths	.290	.382***	18.580				
I'm good at science	.122	.191***	9.679				
				.60	.36	.000	3, 1760

Next, the predictors of academic ingroup bias were investigated. First, the dependent variable was regressed onto independent variables sex, age and nationality. In the second model the stereotyping variables “Girls are better than boys at literacy” and “Boys are better than girls at maths” were added to the model. The results of the regression analysis are shown in Table 4. *R* was significantly different from zero after each step, and after the second step $R = .46$, $F(2, 1778) = 113.19$. In both models all predictors significantly predicted the dependent variable. Specifically, ingroup bias was stronger among younger participants, girls and the Finnish, and among those who more strongly agreed with the statements “Girls are better than boys at literacy” and “Boys are better than girls at maths”. Combined, these five variables explained 21% of variance in the dependent variable.

Table 4.

Predicting academic ingroup bias.

Academic Ingroup Bias							
Model	*B*	*β*	*T*	*R*	R^2	Sig. *F* change	*DF*s
1.							
Sex	.146	.084***	3.753				
Age	-.254	-.316***	-14.105				
Nationality	.167	.095***	4.250				
				.333	.11	.000	3, 1780
2.							
Sex	.223	.128***	5.667				
Age	-.242	-.301***	2.400				
Nationality	.090	.051*	-14.225				
Girls are better than boys at literacy	.154	.187***	8.588				
Boys are better than girls at maths	.216	.267***	12.031				
				.460	.21	.000	2, 1778

Summary of findings

The findings relating to the measures of academic self-efficacy and measures of stereotypical beliefs suggest that in both Finland and the UK, traditional stereotypes about maths and literacy continue to prevail. Consistent with previous research (e.g. Glick & Hilt, 2000), participant's gender affected ingroup bias as girls scored higher than boys. Arguably, this gender effect could be due the real-life gender differences in academic attainment as girls do outperform boys across school subjects and age groups. Glick and Hilt (2000) however argue the sex effect in ingroup bias to be due to women being disadvantaged in terms of power and status in comparison to men. Because of this, both women and girls are argued to have a higher need than men and boys for positively differentiating their ingroup from the outgroup.

Sex was also a significant predictor of overall self-efficacy at school as again girls scored higher than boys. Despite this finding reflecting actual sex differences in academic performance, it may have important connotations that ought to be further investigated. Boys' lower self-efficacy could be an indicator of numerous issues such as a feminization of compulsory education (Closson, 2000) or more negative attitude towards schooling among boys than girls (Whitelaw, Milosevic & Daniels, 2000). However, as low self-efficacy tends to be a self-fulfilling prophecy (Ormrod, 1999), boys are unlikely to catch up girls' results as long as their self-efficacy remains significantly lower.

The regression analysis also showed that independent of age, stereotypical beliefs about boys being better at maths and girls being better at literacy predicted over 10 per cent of variance in the academic ingroup bias. It may be that a belief in these stereotypical views evokes ingroup bias as a tool for positively differentiating from the other sex. Alternatively, this result may have tapped into the difference between stereotype knowledge and actual stereotyping (Signorella & Liben, 1995). The participants may have agreed with the stereotypical view in order to demonstrate that they are aware of the societal norms, but express a strong ingroup bias to show that they do not agree with such a stereotype.

Trait stereotyping: Expressive vs. instrumental traits

For the trait attribution task, the frequency with which the six expressive and six instrumental traits were assigned to men, women or 'both' was examined. The percentage of participants assigning each trait to 'men only', 'women only' or to 'both equally' is shown in Table 5. Children clearly assign expressive and instrumental traits to men and women in a manner consistent with previous research and theory (e.g. Ruble & Martin, 1998). This was especially evident in the traits 'brave' (instrumental) and 'emotional' (expressive), which approximately two thirds of the participants assigned exclusively to men and to women, respectively.

Table 5.

The percentages of participants assigning traits exclusively to either men or women[13]

Trait	Both (%)	Men only (%)	Women only (%)
Confident	49	42.9	8.1
Brave	29.9	66.9	3.2
Leader-like	36.1	45.4	18.5
Assertive (Stands up for themselves)	48.5	44.7	6.9
Persistent (Doesn't give up)	48	39	13
Ambitious (Wants to be best at things)	45.1	46.1	8.8
Empathic (Understands others' feelings)	39.6	3.4	57.1
Unselfish	61	11.8	27.2
Loving	40.3	3.6	56.1
Gentle	56	3.2	40.7
Polite	57	13	30
Emotional	29.3	3.3	67.4

A paired samples t-test confirmed that instrumental traits were assigned to men significantly more than they were assigned to women t (1864) = 45.83, p <.0001, $M_{\text{men}} = 2.7$, $M_{\text{women}} = .56$; and expressive traits were assigned significantly more to women than to men, t (1864) = 51.92, p <.0001, $M_{\text{men}} = .37$, $M_{\text{women}} = 2.6$.

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[13] The description of the attribute as presented to participants is shown in brackets

Next, a 2 (Gender: male, female) x 4 (Age: 8, 11, 14, 16) x 2 (Nationality: Finnish, English) between participants ANOVA was conducted with the number of traits assigned to *both sexes* as the dependent variable. All three independent variables were significantly related to the dependent variable: Finnish children assigned significantly fewer traits to 'both' than did the British, $F(1, 1841) = 100.92$, $p < .0001$, $\eta^2 = .05$, $M_{\text{English}} = 6.08$, $M_{\text{Finnish}} = 4.63$; boys assigned fewer traits to 'both' than girls, $F(1, 1841) = 54.322$, $p < .0001$, $\eta^2 = .03$, $M_{\text{boys}} = 4.82$, $M_{\text{girls}} = 5.88$; and the number of traits assigned to 'both' increased with age, $F(3, 1841) = 17.05$, $p < .0001$, $\eta^2 = .03$, $M_8 = 4.69$, $M_{11} = 5.02$, $M_{14} = 5.70$ and $M_{16} = 6.00$.

There was also a significant interaction between nationality and age, $F(3, 1841) = 11.75$, $p < .0001$, $\eta^2 = .02$. In order to examine simple main effects, post hoc tests with Tukey's correction were performed separately for the two nationalities. Among the English sample, the number of traits assigned to both sexes increased with age, with the two younger age groups showing significantly lower means than the older two ($p < .001$ for all comparisons). The older two age groups did not significantly differ from one another. Among the Finnish sample, only the oldest age group significantly differed from the others ($p < .001$ for all contrasts). This interaction implies that while the English participants displayed a steady increase in egalitarianism and decrease in stereotyping with age, the Finnish participants in the three youngest age groups were equally stereotypical, and only the 16-year olds demonstrated the predicted decline in stereotyping.

Summary of findings

These findings suggest that children and adolescents in England and Finland perceive men and women to possess different qualities. Consistent with findings in adult samples, the gender division in personality works along the instrumental-expressive divide with men being viewed as confident, brave and ambitious, and women as emotional, loving and empathic (Ruble & Martin, 1998). The willingness to assign positive traits in gender stereotypical manner suggests that Powlishta's (1995) finding of ingroup bias interfering with stereotyping was not applicable here. It could be that the effects of ingroup bias were eliminated by using positive traits exclusively. These findings will be considered in greater detail in the subsequent General Discussion.

The number of traits assigned to both instead of either sex increased with age. This supports cognitive theories, which have predicted that flexibility increases with age (e.g. Kohlberg, 1966). Overall boys and the Finnish participants expressed significantly more stereotyped views than the English. Furthermore, the positive effect of age on flexibility was of a significantly lesser magnitude among the Finnish sample. This indicates that among the Finnish sample stereotyping declined less steeply with age than it did among the English sample.

Occupational attitudes: Gender stereotyping and self-efficacy

Participants were presented with a range of occupations and were asked to state whether any of these occupations were suitable for one sex only. The percentages of participants, by age group, nominating one or more occupations to be suitable for one sex only, are shown in Figure 1. As expected, the younger participants were more eager to express occupational gender stereotypes than were the older.

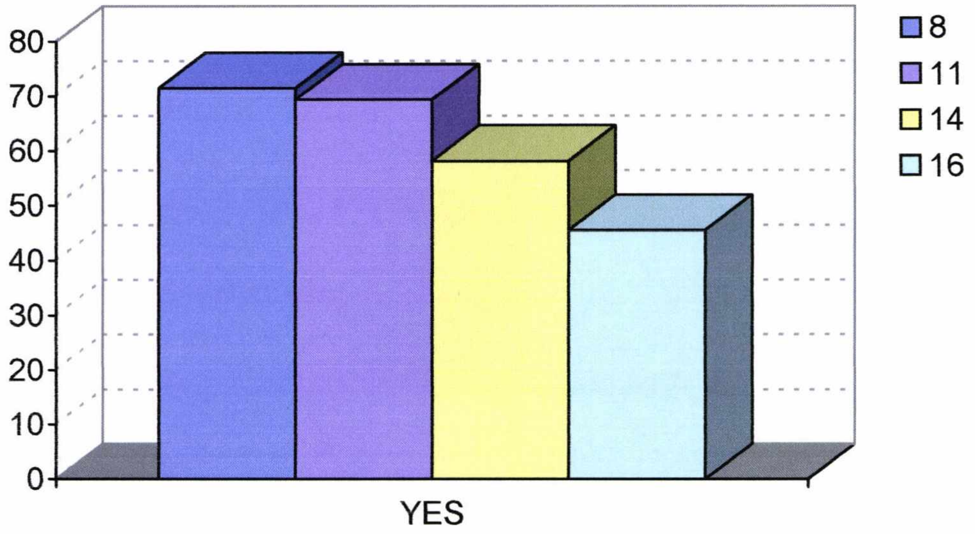

Figure 1. Are there any occupations that are only suitable for men or for women? (Per cent)

Of the masculine occupations, the most stereotyped occupations were builder and mechanic, which were nominated as suitable for men only by 40% and 27% of participants, respectively. Of the feminine occupations the most stereotyped occupations were beautician and nurse, which were nominated as suitable for women only by 32% and 16% of participants, respectively.

A three-way 2 (Gender: male, female) x 4 (Age: 8, 11, 14, 16) x 2 (Nationality: Finnish and English) between participants ANOVA was conducted to explore the effects of the independent variables on how many occupations were nominated as suitable for one sex only. Analysis showed that the Finnish children nominated significantly more occupations than did the British, that boys nominated more occupations than girls and that the number of occupations nominated decreased with age. Table 6 illustrates the significant main effects of nationality, age and sex on the dependent variable.

Table 6.

Significant main effects of nationality, sex and age on occupational gender stereotyping

How many occupations nominated as suitable for one sex only							
	Means				*F (df)*	*p*	Partial η^2
Nationality	$1.59_{English}$		$2.28_{Finnish}$		42.41 (1, 1841)	<.0001	.02
Sex	2.16_{Boys}		1.71_{Girls}		17.37 (1, 1841)	<.0001	.01
Age	2.24_{8}	2.39_{11}	1.76_{14}	1.34_{16}	19.26 (3, 1841)	<.0001	.03

The analysis of variance also revealed a significant interaction between age and nationality, $F(3, 1841) = 82.3$, $p < .0001$, $\eta^2 = .03$. Because of this significant interaction, Post Hoc analyses into the effects of age were performed separately for the two nationalities. These effects are illustrated in Figure 2. As Figure 2 demonstrates, among the English sample stereotyping decreases linearly with age, with the youngest two age groups scoring significantly higher than the oldest two age groups (contrast with Tukey's correction, $p < .001$). The trend is notably different among the Finnish participants as the 11- and 14-year olds score significantly higher than do the 8- or the 16-year olds (contrast with Tukey's correction, $p < .001$).

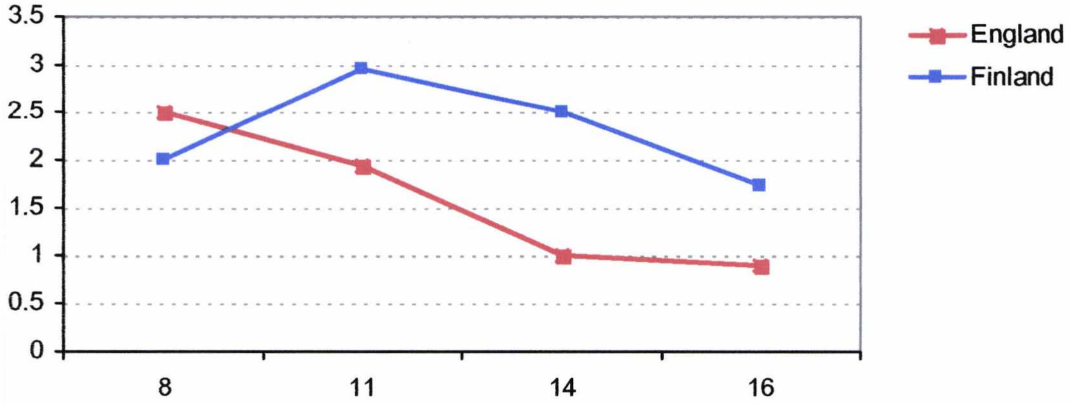

Figure 2. Development of occupational gender stereotyping in England and Finland

Participants' reported self-efficacy for six masculine, six feminine and six neutral occupations is shown in Table 7. More boys than girls expressed self-efficacy for the masculine occupations, and more girls than boys for the feminine occupations. The largest gender gaps in efficacy (in excess of 40 per cent) were shown for occupations builder, mechanic, nurse, childminder and beautician. More girls than boys expressed efficacy for five out of six neutral occupations.

Table 7.

The frequency of participants who 'could do a job if wanted to'

If I wanted to, I could be …								
Masculine Occupations	Boys (%)	Girls (%)	**Feminine Occupations**	Boys (%)	Girls (%)	**Neutral occupations**	Boys (%)	Girls (%)
Builder	61	18.8	**Nurse**	18.8	57.2	**Businessman / woman**	60.6	60
Mechanic	57.2	17.5	**Primary teacher**	39.3	74.4	**Actor / actress**	46.8	69.6
Scientist	46.8	34.7	**Childminder**	36.2	76.4	**Journalist**	50.6	60.6
Accountant	43.7	38.8	**Beautician**	8.7	69	**Vet**	31.3	57.3
Prime minister	46.4	28.6	**Secretary**	32.9	62	**Lawyer**	50.1	55.2
Police	68	48.9	**Cleaner**	31	51.7	**Doctor**	35.2	49.3

Next, the predictors of efficacy for masculine, feminine and neutral occupations were investigated using multiple regression. First, the dependent variable 'efficacy for masculine occupations' was regressed onto independent variables sex, age, nationality and occupational stereotyping. The same procedure was followed for the dependent variables 'efficacy for feminine occupations' and 'efficacy for neutral occupations'. The results of the regression analyses are shown in Table 8.

Table 8.

Predictors of occupational self-efficacy for male, female and gender neutral jobs

Efficacy for Male Occupations							
Model	*B*	β	*T*	*R*	R^2	Sig. *F* change	*DF*s
Sex	-.239	-.40***	-18.715				
Nationality	.047	.08***	3.649				
Age	.029	.11***	4.909				
Stereotyping	-.016	-.12***	-5.659				
				.42	.18	.0001	4, 1852
Efficacy for Female Occupations							
Sex	.348	.55***	28.524				
Nationality	.005	.01	.368				
Age	.013	.04	2.248				
Stereotyping	-.016	-.12***	-6.053				
				.58	.33	.0001	4, 1852
Efficacy for Neutral Occupations							
Sex	.116	.20***	8.856				
Nationality	.060	.10***	4.493				
Age	.064	.23***	10.500				
Stereotyping	-.010	-.08**	-3.480				
				.35	.12	.0001	4, 1852

R was significantly different from zero for each analyses, with *R* = .42, *F* (4, 1852) = 99.7 for the male occupations, *R* =.58, *F* (4, 1852) = 229.76 for the female occupations, and *R* =.35, *F* (4, 1852) = 63.19 for the neutral occupations. For both the efficacy for male and efficacy for female occupations, sex was the strongest predictor. Specifically, being a male was the strongest predictor of efficacy for male occupations, and being a female the strongest predictor of efficacy for female occupations. The strongest predictor of efficacy for neutral occupations was age as the older participants expressed higher efficacy for neutral occupations. The efficacy for neutral occupations was also predicted by sex as girls expressed higher efficacy beliefs than did boys.

Importantly, the predictive value of sex was higher for efficacy for female occupations than it was for male occupations. This indicates that the efficacy gender gap is larger for occupations perceived as feminine, mirroring the previous findings of it being more acceptable for females to pursue masculine interests than vice versa (Powlishta, 2000). Furthermore, participants with higher level of occupational stereotyping expressed lower efficacy for all three types of occupations.

Participants were asked to select which occupation, out of the 18 presented, they would most want to do when they were adults. Table 9 illustrates the occupations nominated most frequently by girls and boys of different ages, as well as the percentage of participants at different age groups choosing a gender-stereotypical, counter-stereotypical or gender-neutral occupation. The results are in line with Helwig's (1998) argument that while older children make more gender-neutral choices, they remain unlikely to choose a counter-stereotypical occupation. In the current sample, the frequency of counter-stereotypical choices was actually greatest in the youngest age group.

The most popular occupations seem to fit relatively well with Gottfredson's theory of circumscription and compromise (1996, see Chapter 1). Eight-year olds' favourites reflect the second stage's strict adherence to sex roles, with a slight reminiscence of the importance given to size and power in the first stage (ages 3-5). The 11-year olds demonstrate the value shift towards social values, a process that's yet more evident in the 14-year olds. Although in accordance to Gottfredson, these two age groups are both in the stage 3 of career development, it is clear that the 11-year olds in the current sample are more concerned with the sex roles than are the 14-year olds, whose chosen occupations are of clearly higher occupational status than are the 11-year olds'. The 16-year olds, who are at the fourth and final stage of Gottfredson's theory of career development, demonstrate by their choices a clear importance of prestige over sex roles.

Table 9.

The favourite occupations and sex typicality of the choices by age group and sex.

Age	Boys' favourites (%)	Girls' favourites (%)	Sex-stereotypical	Counter-stereotypical	Neutral
8	Police (28.7) Builder (12.9) Prime minister (10.1)	Vet (19.3) Teacher (15.4) Actress (10)	58.4%	9.4%	32.2%
11	Police (15.7) Actor (12.2) Mechanic (11.2)	Actress (16.1) Vet (13.4) Beautician (13.4)	52%	7.6%	40.4%
14	Businessman (16.2) Lawyer (10.8) Actor (10.8)	Actress (15.5) Lawyer (9.6) Beautician (9.3) Vet (9.3)	41.5%	7.6%	50.9%
16	Businessman (15.2) Accountant (12.9) Lawyer (8.9)	Actress (15.9) Journalist (14.6) Lawyer (8.5)	31.9%	6.5%	61.6%

Interestingly, throughout the age groups the occupation of actor / actress appeared in the most desired list among girls and for the two middle age groups among boys. This could be due to two reasons. Firstly, it could be that a large proportion of children and adolescents actually aspire to become actors / actresses. Secondly, it is possible that the occupation's popularity was due to it being the only occupation offered that potentially belongs to the 'celebrity' group of occupations. The prominence of celebrity, wealth and glamorous lifestyles has arguably increased during the past decade (Cassidy, 2005), and many social commentators have noted that children and adolescents of today view these factors as central to their decisions regarding future careers (Hill, 2005).

In the terms of Gottfredson's theory (1996) such occupational aspirations are 'idealistic aspirations', which are harboured without much consideration to their reasonability or likelihood. However, that nearly 16 per cent of 16-year old girls still chose this as their favourite of the occupations listed seems somewhat surprising as according to Gottfredson, this age group should already be making choices that reflect their "internal, unique" selves, and are able to consider realistic barriers and opportunities, and to compromise a number of aspirations because of these.

Summary of findings

These findings showed that as expected, younger children hold stronger stereotypes than older children, and that boys are more stereotypical in their occupational attitudes than are girls. Self-efficacy for male as opposed to female occupations revealed that children and adolescents still view themselves as rather unable to pursue occupations of 'the other sex', but that this effect is stronger among boys than girls. The importance of sex-stereotyping is emphasised by its negative relationship with occupational self-efficacy. Importantly, and in line with findings relating to academic and personality stereotypes, the Finnish participants expressed more stereotypical views about occupations than did their English peers. This suggests that the children in these countries consistently differ in their gender stereotypes, thus underlining the importance of conducting cross-cultural studies in this area.

Future roles and division of housework and childcare

A three-way 2 (Gender: male, female) x 4 (Age: 8, 11, 14, 16) x 2 (Nationality: Finnish and English) between participants MANOVA was conducted on the items “I'll have a job”, “My job will be important to me”, “I'll earn a lot of money”, “How much housework will I do”, and “How much childcare will I do” as dependent variables. With the use of Wilks' criterion, the combined DVs were significantly affected by sex, $F(1, 1714) = 152.25$, $p <.0001$, $\eta^2 = .31$ and age $F(3, 1714) = 12.49$, $p <.0001$ $\eta^2 = .04$. The combined DVs were also affected by interaction of age group and sex, $F(1, 1714) = 18.79$, $p <.0001$, $\eta^2 = .05$. The significant main effects of age and sex on each of the dependent variables are displayed in Table 10. Nationality had no significant effect on any of the dependent variables.

Table 10.

Significant main effects of age and sex on future employment variables

			I'll have a job				
	Means				F (df)	p	Partial η^2
Age	4.51_8	4.66_{11}	4.69_{14}	4.71_{16}	7.67(3, 1714)	<.0001	.01
			I'll earn a lot of money				
Sex	3.89_{boys}		3.68_{girls}		24.48 (1, 1714)	<.0001	.01
Age	4.07_8	3.77_{11}	3.66_{14}	3.65_{16}	19.47 (3, 1714)	<.0001	.03
			How much housework will I do				
Sex	2.44_{boys}		3.41_{girls}		631.45 (1, 1714)	<.0001	.27
Age	3.10_8	2.94_{11}	2.87_{14}	2.80_{16}	10.55 (3, 1714)	<.0001	.01
			How much childcare will I do				
Sex	2.88_{boys}		3.34_{girls}		185.89 (1, 1714)	<.0001	.10
Age	3.01_8	3.00_{11}	3.21_{14}	3.23_{16}	14.48 (3, 1714)	<.0001	.03

A significant interaction between age and sex was detected on item "How much childcare will I do", the dependent variable representing assumptions about division of childcare in the future: $F(3, 1714) = 84.95$, $p <.0001$, $\eta^2 = .12$. Hence, the Post Hoc tests with Tukey's correction were carried out separately for the two sexes. Among boys, the older two age groups differed significantly from the younger two, as the older boys expected to perform *more* childcare in the future than did the younger (*p.* <.0001). Among girls the trend was reversed, with only the 8-year olds significantly differing from the other age groups (*p.* <.0001). This interaction is illustrated in Figure 3.

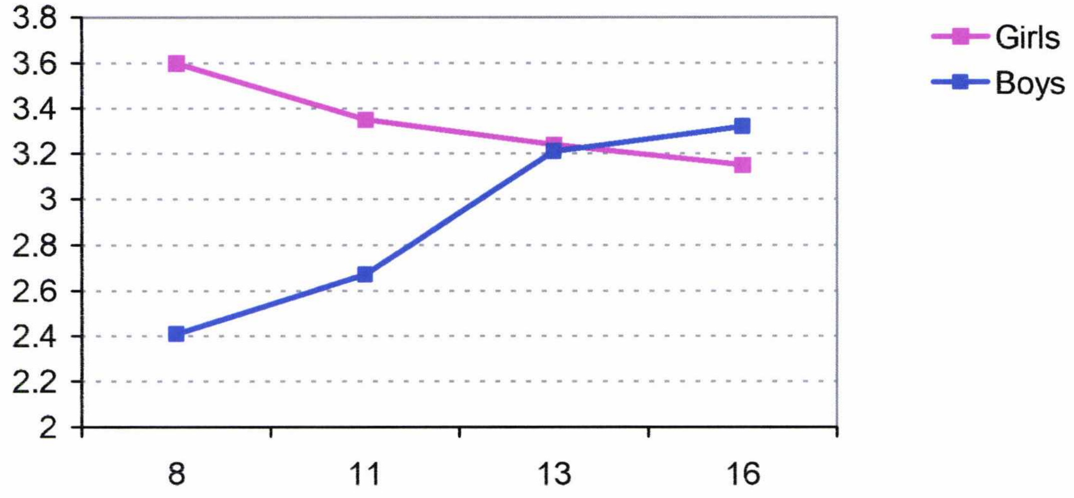

Figure 3. "How much childcare will I do in the future?"

For the other dependent variables, there were no significant interactions between gender, age and nationality, therefore the main effects of age were further investigated with Post Hoc tests with Tukey's correction without splitting the data set. These analyses showed that the youngest age group was significantly different from the rest on the dependent variables "I'll have a job" and "I'll earn a lot of money". In the analysis for the housework variable, the youngest age group was again significantly different from 14- and 16-year olds, but there was no significant difference between the eight-year olds and the 11-year olds. The two younger age groups differed significantly from the two older age groups in their answers to future division of childcare. All these age differences were significant with $p < .001$.

The next stage of analysis was to explore which variables predicted the dependent variables "How much of housework will be shared in the future" and "How much childcare will be shared in the future". Sequential regression was performed to see whether addition of socialization variables (dad being the main earner, mother working, and perception of parents sharing housework and childcare) improved the prediction of the dependent variables from that afforded by variables nationality, sex and age. Because socialization variables were included as predictors, only those participants who lived in a two-parent family were included in the analysis. The results of the regression analyses are shown in Table 11.

For both dependent variables, *R* was significantly different from zero at the end of both steps. For the DV "How much of housework will be shared in the future", after the second step, $R = .51$, $F(3, 1272) = 91.49$, $p <.0001$, and for the DV "How much childcare will be shared in the future" $R = .60$, $F(3, 1272) = 120.70$, $p <.0001$. In the first step the housework dependent variable was predicted by all three independent variables as the Finns, the girls and the older participants expected greater sharing. The age and sex effects were the same for the childcare dependent variable but nationality did not predict this DV significantly.

Model 2 however revealed that the strongest predictor of the housework DV was the perception of the amount of housework own parents share. Of the independent variables entered in Model 1, the effects of sex and age remained significant in Model 2. In the childcare model, the strongest predictor was the perception of the amount of childcare own parents share. Both IVs that were significant in Model 1 remained significant in Model 2.

Table 11.

Predicting future sharing of housework and childcare

How much of housework will be shared in the future							
Model	*B*	β	*T*	*R*	R^2	Sig. *F* change	*DF*s
1.							
Sex	.346	.099***	3.606				
Age	.276	.170***	6.238				
Nationality	.336	.095***	3.467				
				.23	.05	.000	3, 1272
2.							
Sex	.338	.096***	.197				
Age	.254	.156***	6.357				
Nationality	.017	.005	3.977				
Dad the main earner	-.040	-.010	15.661				
Mother works	.186	.037	3.039				
Parents sharing housework	.543	.423***	-.380				
Parents sharing childcare	.078	.081**	1.408				
				.51	.26	.000	4, 1272
How much of childcare will be shared in the future							
Model	*B*	β	*T*	*R*	R^2	Sig. *F* change	*DF*s
1.							
Sex	.719	.163***	6.168				
Age	.562	.276***	10.453				
Nationality	.234	.053	1.994				
				.33	.11	.000	3, 1272
2.							
Sex	.618	.140***	6.193				
Age	.457	.225***	9.767				
Nationality	.088	.020	.854				
Dad the main earner	.122	.025	1.000				
Mother works	.236	.038	1.526				
Parents sharing housework	.071	.044	1.736				
Parents sharing childcare	.579	.479***	19.239				
				.60	.36	.000	4, 1272

Summary of findings

The findings relating to assumptions about future roles revealed that girls and boys are equally likely to think that they will have a job and that their job will be important for them. Girls were less hopeful than boys about earning ‘a lot of money’ in the future. In general, girls expected to do more housework and childcare when they have a family than did boys. Interestingly however, for childcare the effect of sex was reversed among the 16-year olds as among this age group, boys assumed that they will do significantly more childcare in the future than did girls.

The significance of socialization processes were clear in the regression analyses as perception of own parents sharing housework and childcare was the strongest predictor of the belief that these tasks will be shared in the future. However, the effects of perception of own parents sharing childcare and housework were domain specific as perception of own parents sharing one did not predict the participants’ predictions of sharing the other in the future.

General Discussion

The key purpose of Study Two was to obtain a comprehensive view of the extent to which English and Finnish children and adolescents continue to hold stereotypes about the two sexes. Such exploration was deemed necessary for the purposes of this thesis as there have been no previous studies comparing the gender attitudes in these two countries. Furthermore, the results of Study One, in which the attitudes of English and Finnish adults were compared, did not offer conclusive evidence as to one of the nationalities being clearly more stereotypical than the other. The present study was designed to clarify the nationality difference in gender attitudes, and to explore the developmental trends in gender stereotyping within two national samples.

Overall, the results of Study Two demonstrated that children and adolescents in both countries continue to hold strongly stereotypical attitudes about the two sexes, and that these attitudes also influence their perceptions of their own abilities and aspirations. There were five particularly notable findings in the present research, each of which is discussed below together with implications they have for future research and for theories on gender attitudes.

Firstly, Finnish participants expressed greater stereotyping than the English across all measures of stereotyping - academic, personality and occupational. This effect of nationality was somewhat unexpected as the stereotype of Finland is that of a nation marked by gender equality and modern attitudes. Indeed, the current president of Finland, Mrs Tarja Halonen, has been quoted to say: "We are a model country where gender equality is concerned". Finnish women are on average more educated than are Finnish men, the two sexes are equally involved in the labour force and legislation against sex discrimination is extensive. In support of this view, all published cross-cultural indicators of gender equality place Finland among the forerunners on this dimension (e.g. The World Economic Forum, 2005).

However, it is important to note that the indicators of gender equality such as the Gender Empowerment Measure (GEM) are generally based on statistics on educational attainment, health care and structural power, and do not include attitudinal measures. Hence, the present findings are important as they imply that societal measures of women's empowerment are not necessarily an indicator of people's attitudes of the two sexes being non-traditional. Certainly, there are aspects of Finnish society which imply that men and women are viewed in a traditional manner. Such aspects include strongly segregated labour market and childcare policies that encourage mothers to look after infants at home. Furthermore, the ISSP study analysed in Study One showed that Finnish adults agreed more than the English with the sentence "A job is alright but what women really want is home and children". This suggests that the Finnish children and adolescents being more stereotypical than the English in the present study may well be consistent with the views of Finnish society.

The importance of nationality for determining gender stereotypes was further highlighted by the finding that among the Finnish sample stereotyping did not decrease with age as much as it did among the English sample. Both occupational and personality stereotyping declined linearly in England, but in Finland there seemed to be a bell shaped trend: 11- and 14-year olds were generally more stereotypical than were the 8- or the 16-year olds. Furthermore, on both measures, the 16-year old Finns were significantly more stereotypical than their English counterparts.

This interaction of age and nationality implies that the linear decline in gender stereotyping is not universal as assumed by Kohlberg's Cognitive Theory (1966). Instead, the societal differences and socialisation processes seem to have a strong impact on children and adolescents' attitudes, and that these forces cause the Finns to remain more strongly stereotyped across their late childhood and early adolescence than the English. The different developmental trends observed in English and Finnish children underlines the fact that cultural influences interact with age in formulating children and adolescents' gender attitudes.

The second key finding of Study Two was that, as hypothesised, and consistent with previous research (Archer, 1984; Payne, 1981, Urberg, 1982), boys expressed more stereotypical views than girls across all measures of stereotyping. This sex effect has not however been previously demonstrated in Finland, so the present finding added to the universality of this hypothesis.

Previous research and theory (e.g. Glick and Hilt, 2000) have argued that this gender difference is due to the overall power differences in society. According to Glick and Fiske (1996), since the power difference is to the detriment of women, they are more likely to reject traditional gender stereotypes that place them in the subordinate position. In contrast, males perceive the same stereotypes as stabilizers of their dominant position and are therefore disinclined to express disagreement with them. Importantly, the present analysis found no evidence of an interaction between nationality and sex, which indicates that this sex difference is of same magnitude in Finland as it is in England.

The third key finding of the present study was the degree of gender stereotyping relating to personality characteristics. The fact that both children and adolescents were so willing to link expressive qualities to women and instrumental qualities to men, despite having the option of assigning the traits to both equally, highlights the strength of association between men and instrumental and women and expressive qualities. The eagerness to stereotype the positive personality traits was not due to a 'forced choice', but must have truly reflected participants' opinions. It is also notable that ingroup bias, which was influential in measures of attitudes about academic ability, did not seem to influence the linking of exclusively positive personality traits with own sex.

The effect of ingroup bias was hypothesised based on Powlishta's (1995) findings, which suggested that the most important predictor of whether a trait is claimed to describe one's own sex is its perceived positivity. That this was not the case among the present sample indicates that the stereotypes held about the instrumental and expressive qualities are so strong that they override the desire to assign everything that is positive to own sex. It may be that the present study using positive traits only, and not employing forced-choice methodology, made the task seem less as a 'competition' between the sexes, as assigning positive qualities to one sex did not imply assigning negative qualities to the other.

The consequences of such strong personality stereotypes are potentially significant as it could be argued that stereotypes about personality create the foundation on which other gender stereotypes are based upon. Indeed, if women are believed to be less brave, ambitious and independent than men, the occupational stereotypes that emerged in this study would be no more than an obvious consequence of these personality stereotypes. Furthermore, although girls were more likely than boys to assign traits to both sexes rather than just to one, they were nevertheless strongly stereotypical as well. It could be questioned whether girls, although expressing equally ambitious future aspirations as boys truly believe that they will be equal to their male peers as adults if they view these boys as more leader-like and persistent than they view themselves.

The fourth key finding of the present study related to predictors of occupational self-efficacy. It was predicted that girls would express stronger efficacy for feminine occupations and boys for masculine occupations, and results were consistent with this expectation. However, girls were also found to be significantly more confident than boys about their ability to work in a gender neutral occupation, which was not predicted. Furthermore, the effect of sex was much stronger on feminine occupations than it was on masculine occupations. This implies firstly that feminine occupations are viewed as more 'off-limits' by boys than masculine occupations are by girls. This is indeed in line with findings of previous research (Powlishta, 1995). The real-life consequences of this disparity are already demonstrated as the shortage of nurses and carers is even greater than shortage of plumbers and electricians (Miller, Pollard, Neathey, Hill & Ritchie, 2005).

Secondly, the high prestige of the gender neutral occupations means that girls are certainly not unconfident about their own abilities and future career success. Their belief in being able to become lawyers, journalists, businesswomen and doctors makes the findings on personality stereotyping appear yet more curious. This discrepancy could imply that although they perceive themselves as inherently different from males, the 21st century girls do not view this difference as a barrier for their ability to achieve a prestigious occupation in the future.

Hence, it may be that the female participants of this study, or indeed girls overall, do not view assertiveness, determination and independence as crucial prerequisites of a high-flying career. Another explanation could be that despite strongly stereotyping the two sexes, girls did not actually perceive the task as relevant to how they perceive themselves. This possibility is in line with Guimond et al's (2006) insistence that characteristics assigned to one's own sex are not necessarily identical to those assigned to oneself.

The fifth and final key finding of the present study relates to attitudes towards housework and childcare. Although girls expected to perform more of both in the future, the difference was clearly smaller in childcare. Of particular interest is the finding that among the oldest age group, in both countries boys expected to perform significantly more childcare than did girls. The interaction between age and sex was such that while girls assumed to have less sole childcare responsibility the older they got, the boys displayed a reverse trend.

The reason behind the oldest boys expecting to do more childcare than their future partners is unclear. Although previous research has shown that men are increasingly willing to take part in childcare (Kaufman & Uhlenberg, 2000), no study before has found fathers to be eager to do *more* than mothers do. Of course, the current finding can not be taken as a predictor of actual future behaviour, but as the effect size of the interaction was large, and as the childcare findings differed so clearly from responses to housework questions, the present finding implies that the younger generations of boys may indeed be expecting to share the care of their future children to a much greater extent than their predecessors have done. Indeed, as the age effect was not similar on the housework variable, the present finding cannot be taken simply as an indicator of lessening traditionality among the older participants.

Another possible explanation for the surprising interaction could be that as little girls commonly play ‘houses’ and ‘families’, they are probably more aware than same age boys about the parents’ need to perform childcare duties. For them, questions of childcare and housework are part of everyday play, while in contrast boys might only become to think of issues such as how childcare is divided at a later age, when their relationship with female peers begins to change due to sexual attraction (Glick & Hilt, 1998).

It may be that in future families, mothers will be nagging the fathers to do less rather than more childcare! That this will clearly not be the case with housework indicates that children and adolescents continue to believe that mothers and fathers have different roles within a family. The finding that Finnish participants expressed slightly stronger belief in housework being shared in the future may well relate to Finnish women habitually working longer hours at a paid job than do the English.

The separateness of the housework and childcare domains was also highlighted by the predictors of future sharing of both. The importance of socialization processes was obvious as perception of own parents sharing tasks in one domain was the strongest predictor of assumption that the same tasks would be shared equally with own partner in the future. However, this relationship was domain specific as perception of own parents sharing housework did not predict assumption of sharing childcare in the future. Similarly, perception of own parents sharing childcare as a predictor of assumption of sharing housework in the future was only marginally significant.

Although the findings of the present study were enhanced by the large number of participants in a wide range of ages, the findings could be hindered by cross-sectional rather than longitudinal sample being used. Hence, the effect of cohort cannot be excluded as it could indeed be that the different age groups have been affected differently by the societal influences. Although this is an unlikely explanation, a longitudinal study using similar measures would be beneficial before drawing conclusions about the effect of age in the two countries.

Conclusions

Overall the present findings demonstrate that gender stereotyping is still widespread among 21st century children and adolescents, and that this stereotyping is not without consequences. However, the results also clearly indicate that some stereotypes and attitudes have changed as girls expressed high confidence in becoming a lawyer or a businesswoman, and boys appeared to be keen to take over childcare duties from their future partners.

The consequent studies in this thesis will aim to replicate and examine in more detail the finding that Finns are more gender stereotypical than are the English. This nationality effect is crucially important as it highlights the disparity between generally accepted measures of gender equality and actual attitudes. Furthermore, if Finns are indeed shown to be consistently more stereotypical than the English, implications for Finnish gender research and societal structures, which are currently heralded as the forerunners of gender equality, are important.

The following studies in this thesis will also further investigate the strong stereotyping of instrumental and expressive qualities evident in the present study. As these stereotypes could arguably be thought of as the foundation of sex stereotyping, it is important to replicate and test the reliability of the present findings and to extend the measures to include self-perceptions as well as group stereotypes. Furthermore, it is important to explore the attitudes between personality and occupational stereotypes as it seems curious that girls would be keen to label their own sex less ambitious than men, but also express equally ambitious future aspirations as well as higher efficacy both at school and in assumptions about future careers.

Chapter 6: Implicit and explicit gender stereotyping – relationships between measures among adolescents

This chapter presents the third study of the thesis. The aim of Study Three was to extend understanding of personality gender stereotypes that were discovered to be robust among children and adolescents in Study Two. Although Study Two also revealed strong stereotypes in academic, occupational and family roles, in Study Three it was decided to focus on the personality stereotypes since it could be argued that these form the foundation upon which other gender stereotyping may be based. In other words, if men and women were not perceived to possess such different degrees of instrumentality and expressiveness, they would not be deemed to differ in academic, occupational and family domains either. The present study introduced two unique instruments to gauge gender stereotyping. Firstly, The Implicit Association Test (Greenwald, McGee & Schwartz, 1998) was modified to test implicit attitudes about expressiveness and instrumentality. Secondly, the Ambivalent Sexism Inventory (Glick & Fiske, 1996) was adapted for use in a non-adult population.

Instrumental and Expressive Traits

Study Two's results were in line with research findings among adults, as children and adolescents deemed men to be significantly more instrumental than women and women significantly more expressive than men. The perception of gender difference was strong despite employing a non-forced-choice methodology. Study Two's results also showed that, as expected based on previous research and theory, children became more flexible in their attitudes as they got older and that boys were more stereotypical than girls. After the ambiguous findings of Study One, Study Two showed the Finns to be more stereotypical than the English in their trait attribution. Interestingly, and contrary to expectations, this national difference was moderated by age. While the flexibility in trait attribution increased with age among the English, the Finnish demonstrated a bell-shaped trend with the 11- and 14-year olds expressing the most inflexible attitudes. Study Three aimed to further address these findings and sought to explore reasons for the found nationality and age effects.

Measures of self-attribution of instrumental and expressive traits were not included in Study Two as the focus was on establishing trends in stereotyping. Typically, self-attributions of instrumental traits have been used to infer self-perceived masculinity while self-attributions of expressive traits have been used to infer self-perceived femininity (e.g. Boldizar, 1991; Hall & Halberstadt, 1980). However, Spence and Buckner (2000) argued that this method is very limited as gender has long been accepted to be a multidimensional concept. Hence many people only exhibit modest consistency in the degree to which they display male-typical or female-typical behaviour across different domains. Consequently, Spence and Buckner (2000) argued that when people rate themselves on gender-linked attributes they may be doing so without perceiving the attributes to be typical of either gender.

Empirical research during 1970s and 80s supported the view that men and women differ in their self-concepts of instrumentality and expressiveness (e.g. Bem, 1974; Spence & Helmreich, 1978) and it was suggested that this difference is due to inborn characteristics. The idea that gender differences are due to innate characteristics has commonly been used as a justification for women's subordinate position in the society (Spence & Buckner, 2000). Many contemporary investigators have rejected this idea and instead emphasise the importance of context in determining this gender division. The modern gender theory argues instead that men's greater instrumentality and women's greater expressiveness is a result rather than a cause of society's gender-role division (Spence & Buckner, 2000).

There is some support for this argument. Spence and Buckner (2000) speculated that societal changes during the past two decades (e.g., more women being employed, narrowing of gender gap in managerial positions) have lessened the gender gap in self-concept of instrumentality. They also hypothesised that, although men are increasingly encouraged to 'be in touch with their feminine side' very few societal changes have taken place that would encourage contemporary men to become more expressive than their predecessors. Furthermore, as the main responsibility of childcare and housework still falls on women, Spence and Buckner (2000) predicted that the gender gap in expressiveness has remained wide.

Spence and Buckner's (2000) found some support for these hypotheses. Their findings suggested that expressive qualities were deemed strongly feminine, whereas the gender differences in attribution of instrumental traits were more complex. Further analysis of their findings suggested that the gender gap has lessened in instrumental traits that relate to assertiveness and ambitiousness while it remains wide in traits relating to risk-taking or selfishness. This implies that while women and girls are being increasingly encouraged to have high aspirations and to stand up for their legitimate rights, they are still being discouraged from displaying traits that would compromise well-being of others (e.g. aggressiveness) or threaten men's position in society (e.g. competitiveness).

Similar conclusions were drawn by Diekman and Eagly (2000) who investigated perceptions of changes in women's roles and the effect of this on personality of women (see Chapter 1 for more detailed discussion). They found that women were believed to have adopted more stereotypically masculine personality traits over time from 1950s onwards. However, participants did not believe that men had changed or would change much in personality traits (either masculine or feminine). These predictions were mediated by perceptions of non-traditional roles as women taking on non-traditional roles led to the perception that women would also shift toward more masculine personality traits. Diekman and Eagly's (2000) study showed that women's personality was viewed to have changed, or to change, as their roles grow more non-traditional and diverse, whereas the underlying assumption was that men's traits have not changed in the past 50 years and are unlikely to change in the future.

Guimond et al. (2006) examined gender differences in self-concepts and the role that social comparison had on these differences in a series of studies. Relevant to the current research was their finding which showed that stereotyping of ingroup as either expressive or instrumental was a strong predictor of self-construal of the same dimension. Guimond et al. (2006) therefore argued, in line with Cross and Madsen (1997), that men and women, to a great extent, define the self in terms of the stereotype they hold of their own sex.

The Implicit Association Test

The Implicit Association Test (IAT) was developed by Greenwald and colleagues (1998). It assesses the strength of an association between two concepts that typically represent a target (e.g. male vs. female) and a dimension (e.g. good vs. bad). Traditionally, the IAT has been used for studying intergroup relations as the task uncovers whether participants are quicker at associating their own group (compared to the out-group) with positive valence and the out-group (compared to the in-group) with negative valence. For example, it has been demonstrated that white participants more readily associate white people with positive valence and black people with negative valence than vice versa (Greenwald, McGhee & Schwartz, 1998). These effects have been reliably produced despite the transparency of the purpose of the IAT (McConnell & Leibold, 2001).

The key criticism of the IAT centres around the question of what the IAT actually measures. Two views have been put forward, one of which argues that the IAT measures attitudes (e.g., Dasgupta, Greenwald, & Banaji, 2003; Wilson, Lindsey, & Schooler, 2000), and another that argues the IAT simply reflects individuals' exposure to associations in their social environment (Karpinski and Hilton, 2001).

The advocates of 'the IAT as an attitude' believe that the IAT is a measure of implicit out-group attitudes (Fazio & Olson, 2003). In contrast, the proponents of 'the IAT as an association' argue that associations reflect mere exposure to a societal norm and are not necessarily *endorsed* by the individual. In support of the latter view, Karpinski and Hilton (2001) found that mere exposure to 'young – bad' and 'old – good' stimuli before completing the IAT significantly reduced implicit youth bias, while explicit bias remained unchanged.

Another important debate surrounding the IAT is the relationship between implicit and explicit attitudes. Literature on the IAT represents vast variation in implicit – explicit attitude consistency, as some studies report significant positive correlations (e.g., McConnell & Leibold, 2001), and others very low or non-significant correlations (e.g., Fazio, Jackson, Dunton, & Williams, 1995; Kawakami & Dovidio, 2001). Low correlations between the two types of measurement could mean that implicit and explicit attitudes are actually independent of one another (Greenwald & Banaji, 1995; Karpinski & Hilton, 2001).

Another explanation for low or non-significant correlations between implicit and explicit measures has been proposed by Fazio and Olson (2003) and Wilson et al. (2000). Both of these accounts suggest that correlations between implicit and explicit attitudes will vary systematically depending on whether participants have the motivation and opportunity to control their explicit attitudes (Fazio, 1990). For example, explicit attitudes may be affected if participants assume them to be socially undesirable or if they think that the person administering the measurement has strong opinions on the attitude at hand (e.g. black researcher administering racial attitude measure). However, the two sets of authors disagree on their conceptions of implicit attitudes. Fazio and Olson (2003) argue that a single attitude has both a spontaneous, implicit component and a deliberative, explicit component. Alternatively, Wilson et al. (2000) propose that people hold 'dual attitudes'. These are different evaluations of the same attitude object, one implicit and one explicit.

Research into gender stereotyping employing implicit measures has highlighted the inadequacy of self-report measures as investigations have found men and women's implicit attitudes to vary from their self-reported beliefs (e.g. Banaji & Greenwald, 1995; Blair & Banaji, 1996). Rudman, Greenwald and McGhee (2001) argue that implicit attitudes are less likely to show differences based on participants' sex or explicit attitudes. For example, Rudman and Kilianski (2000) found men and women to express similar levels of implicit negativity towards women in positions of authority despite there being a gender gap in explicit attitudes. As Greenwald & Banaji (1995) argue, the weak correlation between explicit and implicit gender stereotypes implies that the explicit and implicit attitudes are indeed different constructs.

Rudman et al. (2001) studied the dimensions powerful-weak and warm-cold in relation to the two sexes. They found that the IAT was sensitive to automatic concept-attribute associations underlying implicit stereotypes as men were deemed more powerful than women while women were deemed warmer than men. However, Rudman et al.'s (2001) IAT included gender stereotypes with two poles (powerful-weak and warm-cold) thus maintaining the typical positive-negative dimension of the IAT. However, this effect was moderated by gender of the participant. Rudman et al. (2001) found that male-powerful association was stronger in men than women, while the female-warmth association was stronger in women than men. This demonstrates the importance of group membership for implicit associations and stereotypes.

The implicit stereotype appears to be biased in a self-favourable direction (Rudman et al., 2001, p. 1176). When Rudman et al. (2001) combined the IAT to only include the positive attributes (power vs. warmth) they found no sex differences in stereotyping.

Present Study

The main aim of the present study was to further examine personality gender-stereotypes that run along the instrumentality – expressiveness dimension. The instrumental and expressive traits were selected from the Personal Attribute Questionnaire of Spence and Helmreich (1978). Importantly, attitudes relating to instrumental and expressive traits were examined using both implicit and explicit measures. This study represents the first time instrumental and expressive traits have been examined in this way. Furthermore, the implicit measure used in this study - a gender-personality IAT - included two positive valences instead of the customary method including a positive-negative polarization.

In line with Spence's research, the present study examined relationships between the explicit expressive-instrumental attitudes and other measures of gender stereotyping. In addition to the IAT, measures of the role traditionalism and the Ambivalent Sexism Inventory (Glick & Fiske, 1996) were included by way of comparison. As in Study Two, Study Three was also interested in the importance of sex and nationality for each of these measures.

Unlike Study Two, Study Three employed two age groups only, both of which were adolescents. The younger age groups included in Study Two were not included in the present study because the measures employed were deemed unsuitable for younger children. The IAT has rarely been used with non-adult samples so the ability of children to reliably complete the task was questioned. Furthermore, it was felt that expressive and instrumental traits used were rather complex and might not be fully understood by younger children. However, studies that have previously used the IAT with adolescent samples have found them able to successfully complete the task (e.g. Turner, Hewstone & Voci, 2006). In addition, the Ambivalent Sexism Inventory has rarely been used among non-adult samples. In order to understand the items included in the ASI participants require a level of understanding of heterosexual relationships that could not be expected of children. However, it was possible to adapt the ASI items to be comprehensible to teenagers without loosing the underlying sentiment of the items.

Predictions

Study Three attempted to replicate the Study Two's finding that Finnish participants and boys are more stereotypical in their personality stereotypes than the English and girls. Because of the interaction of age and nationality found in Study Two, the present study sought to further clarify this effect. Namely, it was of interest to see whether the younger Finns expressed more stereotypical views than did the older as could be predicted based on Study Two. Because of the novel measures used in the present study however, it was felt that a wider range than just one age group should be included in the sample. The only previous study to have used the ASI among a non-adolescent sample found that adolescents scored lower than adults on benevolent subscale. In the present study however, no age differences were predicted to emerge between the two age groups on either the modified ASI or the Role Traditionalism Scale. However, in line with findings among adult samples (Glick et al., 1996, 1998), boys were predicted to score higher than girls on the ASI.

Based on the findings of Study Two, as well as previous research, it was predicted that according to the established stereotype men, as a group, will be perceived to be more instrumental than women, while women will be perceived as more expressive. To extend Study Two, the present study also included a measure of self-concept of expressiveness and instrumentality, which has rarely been studied among adolescents. The sex difference was predicted to follow the same line as that of gender stereotyping; boys were hypothesised to score higher than girls on the self-concept of instrumentality, while girls were expected to score higher than boys on the self-concept of expressiveness. However, in line with Spence & Buckner's findings (2002) the gender gap in self-concepts was predicted to be larger for the expressive than for the instrumental traits.

On the IAT measure, a stronger association (demonstrated by shorter reaction time) was expected between females and expressive traits and males and instrumental traits. The difference between stereotype congruent and stereotype incongruent associations were expected to be larger for those participants who express a stronger stereotypical self-concept (instrumentality for boys, expressiveness for girls). As boys have consistently been found to express more stereotypical views than girls, boys were hypothesised to show stronger implicit stereotypical associations than girls. Explicit and implicit attitudes about traits were also predicted to be positively correlated although the magnitude of this relationship was expected to be rather small.

Method

Participants

The participants in this study were 302 12-13 year old and 15-16 year old Finnish and English adolescents. The mean age for the younger age group was 12.71 years and for the older 15.91 years. In the remainder of the chapter these two age groups will be referred to as 13- and 16- year olds. The English participants were recruited from two secondary schools in Kent and the Finnish participants were recruited from two schools located in a suburb near the Finnish capital city, Helsinki. The distribution of boys and girls within each age group in the two countries is shown in Table 1.

Table 1.

The age, sex and nationality distribution of the participants

	ENGLAND		FINLAND		
	Boys	Girls	Boys	Girls	Total
13 year olds	38	39	37	37	151
16 year olds	33	38	42	38	151
Total	71	77	79	75	**302**

Procedure

In line with ethical requirements, parental permission was sought from the parents or guardians of participants. Parents of all pupils from the two age groups in participating schools were sent an information letter that explained the purpose and the procedure of the study. They were asked to send back an ‘opt-out’ slip if they did not want their child to participate in the study.

During the data collection participants were tested in a quiet room at their schools in groups of five. First, the researcher went through a list of words used in the study with the whole group. When satisfied that all the participants understood the words, the participants were seated in front of five separate laptop computers. The order of explicit and implicit tasks was counter-balanced so half of the groups began by filling in the paper questionnaire, while the other half started with the IAT.

The participants were given on-screen instructions as to how the computerised test worked and told to ask any questions they may have. Once the researcher was satisfied that all participants understood how the programme worked, they were given permission to start. Both the paper questionnaire and the IAT were originally designed in English and subsequently translated into Finnish by the researcher. The initial translations were back-translated by an independent person proficient in both languages. The items in the questionnaire are shown in Appendix 2.

Sex stereotype IAT

Inquisit Software by Millisecond was used to adapt the Implicit Association Test (IAT; Greenwald et al., 1998) for the present study. The IAT involved repeatedly categorising target stimuli and attribute stimuli which appeared one at a time on the computer screen. Target stimuli were six female names and six male names. Attribute stimuli were six instrumental traits and six expressive traits. The stimuli were derived from a pilot test conducted with a sample of Finnish and English adolescents (N = 25 $_{\text{Finland}}$, N = 27$_{\text{England}}$).

Participants were presented with 15 expressive and 15 instrumental traits included in the PAQ (Spence & Helmreich, 1978) and were asked to state how much each of the traits described someone that is either 'Caring' or 'Ambitious'. These titles were used instead of expressive and instrumental, which were deemed to be unfamiliar to most adolescents. The six traits with the highest mean scores for describing an ambitious or caring person were chosen for the IAT. These traits were the same among the Finnish and the English pilot test samples. The male and female names used as target stimuli were among the most popular first names given to babies in the UK and Finland during 1960s[14]. An attempt was made to match the English and Finnish names for length and choose ones as similar to each other as possible (e.g. Andrew – Antero). The stimuli used in the IAT are shown in Table 2.

Participants were told that they were taking part in a 'Sorting Task' where they would have to sort words into different groups using two keys ('E' on the left of the keyboard and 'I' on the right of the keyboard). On this basis, they then engaged in five categorization tasks, each split into practice and test trials. For the first task, participants were told they would see either male names or female names in the middle of the screen. The word 'MALE' was present at the top left of the screen and the word 'FEMALE' at the top right of the screen to depict these two categories. Names were presented in the middle of the screen one at a time and participants were instructed to press

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[14] The Finnish names used in the IAT were derived from Vaestorekisterikeskus (population registrar) website www.vaestorekisterikeskus.fi, while the English names were derived from the ESRC website www.esrc.ac.uk.

'E' key on the left of the keyboard if a male name appeared and 'I' key on the right of the keyboard if a female name appeared. The second task required the categorisation of instrumental and expressive traits. It used the same technique as in Task 1 but in this task the word 'AMBITIOUS' was presented at the top left of the screen and the word 'EXPRESSIVE' was presented at the top right of the screen. Participants had to sort ambitious (instrumental) and caring (expressive) traits into these two groups using the 'E' key for ambitious qualities and the 'I' key for caring qualities.

Table 2.
The IAT stimuli

English IAT		Finnish IAT	
Target stimuli – male	Target stimuli – female	Target stimuli – male	Target stimuli - female
John	Susan	Juhani	Susanna
Peter	Helen	Tapani	Helena
Andrew	Claire	Antero	Kristiina
David	Julie	Timo	Julia
Paul	Anne	Pauli	Anne
Mark	Karen	Markku	Kaarina
Attribute stimuli – Instrumental	Attribute stimuli – Expressive	Attribute stimuli – Instrumental	Attribute stimuli – Expressive
Ambitious	Caring	Kunnianhimoinen	Huolehtivainen
Determined	Loving	Päättävainen	Rakastava
Assertive	Emotional	Pitää puolensa	Tunteellinen
Competitive	Kind	Kilpailuhenkinen	Kiltti
Successful	Helpful	Menestyvä	Avulias
Confident	Unselfish	Itsevarma	Epäitsekäs

In the third task, the incongruent trial, the names and traits were combined into a mixed list of stimuli presented one at a time on the screen. At the top left of the screen the words 'MALE' and 'AMBITIOUS' were shown, while at the top right of the screen the words 'FEMALE' and 'CARING' were presented. Using the 'E' and 'I' keys participants were required to sort male names and ambitious traits onto the left side of the screen and female names and caring traits onto the right side of the screen. The fourth task was a repeat of the second, with the category labels swapped around so participants had to classify ambitious and caring traits onto the opposite side of the screen that they had become accustomed to. The fifth task was the incongruent trial and was similar to the third, except that participants had to sort male names and caring qualities using the 'E' key on the left and female names and ambitious traits using the 'I' key on the right. The third task and the fifth task were the critical trials and it was expected that participants would show faster reaction times on the attitude congruent trial than on the attitude incongruent trial.

The side of the screen on which stimuli were presented and the order of the critical trials were counterbalanced by changing the order of the steps three and five so that half of the participants were asked to pair male and ambitious first (attitude congruent first), while the other half paired female and ambitious first (attitude incongruent first).

All practise blocks consisted of 20 trials while the critical blocks consisted of 41 trials. Each of the stimuli items were shown until the correct response was made. The next stimulus followed after a 150-ms interval. The programme recorded the time elapsed between display of the item and occurrence of the correct response. A mean latency of responses and an error rate were displayed after each block to encourage the participants to be fast but accurate. The IAT score was calculated by subtracting the average reaction time for the congruent pairings (male – ambitious & female – caring) from the reaction time for the incongruent pairings (male – caring & female – ambitious). The IAT score (D-score) thus reflected an implicit association between females and 'caring' and men and 'ambitious'.

Questionnaire measures

Participants noted their sex and date of birth on the cover page, while the researcher wrote down the IAT number of participants in order to later match the questionnaire with the IAT responses. The paper questionnaire contained the following measures:

Sex-stereotypes of expressive and instrumental traits Participants were asked to rate on a seven-point scale the extent to which each of the twelve attributes used in the IAT described a) men in general and b) women in general. The Cronbach's alpha values for each scale demonstrated good reliability (men instrumental .72, men expressive .80, women instrumental .78, women expressive .78).

Self-concept of Expressive and Instrumental Traits Participants were asked to evaluate themselves on the same 12 attributes that were used in the IAT and in explicit stereotyping of men and women. The reliability of both scales was good with Cronbach's alpha of.84 for the self-evaluations on the instrumental qualities and .80 for the self-evaluations on the expressive qualities.

Role traditionalism Participants were presented with 16 sentences, of which eight were sex stereotypical (e.g. "Work is more important to men than it is to women") and eight were egalitarian (e.g. "Men and women are equally caring"). They were asked to indicate on a seven-point likert-type scale how much they agreed or disagreed with each statement. For the purpose of the analysis, the egalitarian items were reversed scored, and then an average obtained for the whole 16-item scale. The reliability of the scale was good with Cronbach's alpha = .83.

Ambivalent sexism The short version of ambivalent sexism scale developed by Glick and Fiske (1999) [15] was adapted for use with adolescents. The scale consisted of 12 items of which six were hostile (H) and six benevolent (B), with two selected from each subscale). The wording of the items was simplified and the use of negative items was minimised to one. The participants responded to the items on a seven-point Likert-type scale anchored by 1 (strongly disagree) and 7 (strongly agree). The items included in the scale were:

1. Every man ought to have a woman he adores. (B – Heterosexual intimacy)
2. Women are too easily offended. (H)
3. Women should be cherished and protected by men. (B – Protective paternalism)
4. Most women are not grateful enough for all that men do for them. (H)
5. When women loose to men in a fair competition, they often complain that they have been treated unfairly. (H)
6. Women are more innocent and virtuous than men. (B – Complementary Gender Differentiation)
7. When a woman is in a relationship with a man, she tries to control him and tell him what to do. (H)

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[15] The original items are shown in Appendix 4

8. In a big accident, women should be rescued before men. (B – Protective paternalism)
9. Women often exaggerate problems they have. (H)
10. A man can be completely happy even if he is not in love with a woman. (B – Heterosexual intimacy, reverse scored)
11. Many women don't want to be just equal with men, but actually want to have more power than men do. (H)
12. Women tend to have a better sense of right and wrong than men. (B – Complementary Gender Differentiation)

The reliability for the hostile scale was good at .83. The reliability for the benevolent scale was less satisfactory with alpha of .55, but this increased significantly after dropping the only negative item (item 10 above). The final alpha for the benevolent scale = .61. These values are acceptable based on Glick et al.'s research (1996, 2000).

Results

The IAT results

In accordance with typical IAT analyses, the first trial of each block was excluded from analysis due to the presence of longer reaction times. The IAT score was calculated using the algorithm developed by Greenwald, Nosek, & Banaji (2003). The average error rate was 8.48%. The results showed that, on average, men were more highly associated with ambitious traits than women and women were more highly associated with caring traits than men (*M* = .17, *SD* =. 49). However, the mean IAT score which combines the latencies of practise and test blocks was rather small. As similar findings have been reported on other gender related IATs (Nosek, Greenwald, & Banaji, 2005), the scores on the practise and test blocks were also examined individually. These analyses showed the mean D-score to be near zero for the practise blocks (*M* = .03, *SD* = .84), but much higher for the test blocks (*M* = .31, *SD* = .40).

Because of these large differences, a 2 (Gender: male, female) x 2 (Age: 13, 16) x 2 (Nationality: Finnish, English) between participants MANOVA was conducted to examine the effects of presentation order of the congruent and incongruent blocks on the *D*-scores. There was a significant main effect of order on the *D*-score for the practise blocks, *F*(1, 300) = 1607.8, *p* <.0001, η^2 = .84, and on the *D*-score combining practice and test blocks *F*(1, 300) = 724.48, p <.0001, η^2 = .71. However the main effect of presentation order on the *D*-scores for the test blocks was non-significant, *F*(1, 300) = 3.61, *p* <.06. As the strong effect of presentation order was in line with previous findings (Nosek, Greenwald, & Banaji, 2005), further analysis was carried out on the *D* (test) scores. A 2 (Gender: male, female) x 2 (Age: 13, 16) x 2 (Nationality: Finnish, English) between participants ANOVA revealed a significant main effect of sex on this D-score, as girls showed a significantly stronger male-instrumental, female-expressive association than boys, *F*(1, 294) = 6.89, p <.01, η^2 = .02, M_{boys} = .25, M_{girls} = .37.

In the present study, the order of presentation for the congruent and incongruent blocks was counterbalanced. As the effect of order was very strong, we wanted to examine the effects of presentation order further. When the incompatible task (men – caring and women – ambitious) was presented first, the mean D-scores for the practice + test was -.24 (SD = .47), indicating that men were associated with caring and women with ambitious traits more strongly than vice versa. The mean *D*-score of .26 (*SD* = .41) for the test block however indicates that even when the incompatible task was presented first, the stereotypical association emerged stronger than the counter-stereotypical association after practise.

The mean *D*-scores for the participants who completed the stereotypical pairing task first were much higher: $M_{\text{practise}} = .80$, $SD = .32$, $M_{\text{test}} = .35\ (.39)$, $M_{\text{practise + test}} = .57(.27)$. A 2 (Gender: male, female) x 2 (Age: 13, 16) x 2 (Nationality: Finnish, English) between participants ANOVA was conducted to examine the effects of sex, age and nationality on the *D*-scores of participants in the compatible-block first condition. A main effect of sex on the D_{test} score was found to be even stronger than it was among the entire sample: $F(1, 144) = 15.39$, $p < .0001$, $\eta^2 = 1.00$, $M_{\text{boys}} = .23$, $M_{\text{girls}} = .48$, as girls showed significantly stronger stereotypical association than boys. There was also a significant main effect of nationality on the D_{practice} score, as in the practice trial the Finnish participants showed a stronger stereotypical association than did the English, $F(1, 144) = 28.11$, $p < .0001$, $\eta^2 = 1.6$, $M_{\text{English}} = .67$, $M_{\text{Finnish}} = .92$. The effect of nationality was non-significant on the D_{Test} score, but remained significant on the combined $D_{\text{practise + test}}$ score, $F(1, 144) = 17.26$, $p < .0001$, $\eta^2 = 1.1$, $M_{\text{English}} = .50$ $M_{\text{Finnish}} = .66$.

Explicit sex-stereotypes of expressive and instrumental traits

In general, men were evaluated to be significantly more instrumental than women $t(1, 301) = 13.94$, $p < .0001$, $M_{\text{men}} = 5.37$, $M_{\text{women}} = 4.68$, while women were evaluated to be significantly more expressive than men $t(1, 301) = -26.84$, $p < .0001$, $M_{\text{men}} = 4.21$, $M_{\text{women}} = 5.65$. Next, these evaluations were examined for the effects of sex, age and nationality. A 2 (Gender: male, female) x 2 (Age: 13, 16) x 2 (Nationality: Finnish, English) between participants MANOVA revealed a significant main effect of sex as girls evaluated women significantly higher on instrumentality than boys, $F(1, 294) = 8.73$, $p >.005$, $\eta^2 = .03$, $M_{\text{boys}} = 4.55$, $M_{\text{girls}} = 4.81$. There was also a significant main effect of age, as the 13-year olds evaluated men significantly higher on instrumentality, $F(1, 294) = 8.10$, $p <.005$, $\eta^2 = .03$, $M_{13} = 4.34$, $M_{16} = 4.08$, and women significantly higher on expressiveness than the 16-year olds $F(1, 294) = 13.93$, $p <.0001$, $\eta^2 = .05$, $M_{13} = 5.79$, $M_{16} = 5.51$.

A main effect of nationality was also found as the Finnish participants evaluated men significantly higher on expressiveness than did the English, $F(1, 294) = 12.19$, $p < .001$, $\eta^2 = .04$, $M_{\text{English}} = 4.05$, $M_{\text{Finnish}} = 4.37$ while the English rated women significantly higher on instrumentality than did the Finnish, $F(1, 294) = 9.55$, $p < .005$, $\eta^2 = .03$, $M_{\text{English}} = 4.82$, $M_{\text{Finnish}} = 4.54$. However, the gender gap in instrumentality was smaller in both countries (.53 and .84 for English and Finnish, respectively) than was the gender gap in expressiveness (1.65 and 1.24 for English and Finnish, respectively).

Self-concept of Expressiveness and Instrumentality

A 2 (Gender: male, female) x 2 (Age: 13, 16) x 2 (Nationality: Finnish, English) between participants MANOVA showed girls to perceive themselves significantly more expressive than boys, $F(1, 293) = 20.44$, $p <.0001$, $\eta^2 = .07$, $M_{\text{boys}} = 4.84$, $M_{\text{girls}} = 5.27$. The sex difference on the instrumental scale was only marginally significant, $F(1, 293) = 6.47$, $p <.01$, $\eta^2 = .02$, $M_{\text{boys}} = 5.35$, $M_{\text{girls}} = 5.07$. Self-evaluations on the expressive and instrumental scales were moderately correlated (Pearson's $r = .23$, $p<.0001$).

Next, the effects of age, sex and nationality were examined with the 'Sex stereotypicality' (for girls, the self-perception of expressiveness and for boys, self-perception of instrumentality) as the dependent variable. The only independent variable to have a significant effect was age, as the younger participants perceived themselves much more sex-stereotypically than the older participants, $F(1, 294) = 16.44$, $p < .0001$, $\eta^2 = .05$, $M_{13} = 5.51$, $M_{16} = 5.11$.

Trait stereotyping: Mediation Analysis

To test the model proposed by Guimond et al. (2006), a series of regression analyses were performed following the procedure advocated by Baron and Kenny (1986). The analyses were first performed with the self-concept of expressiveness as a target variable. The results are shown in Figure 1.

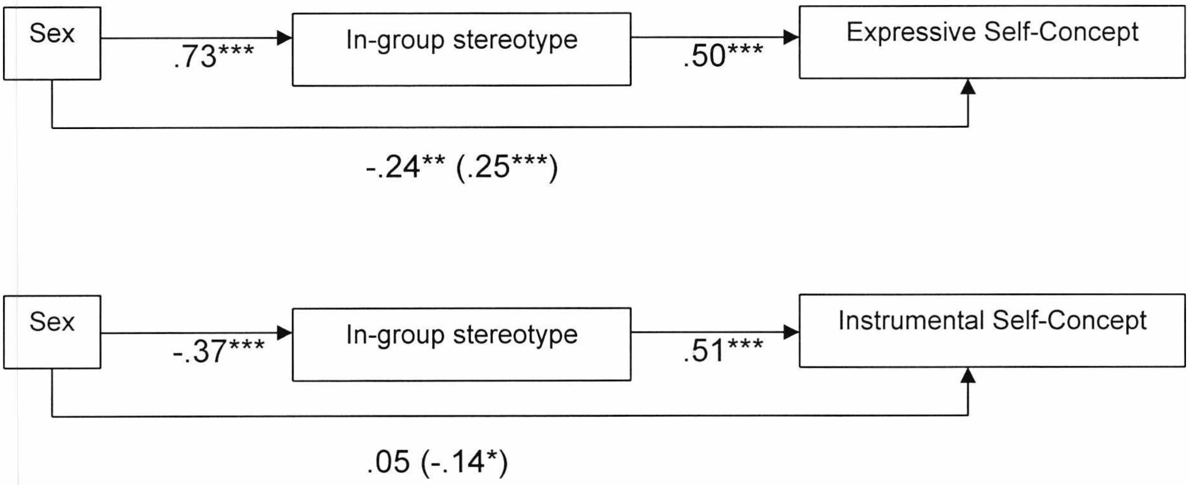

Figure 1. Ingroup stereotype mediates the effect of sex on self-concepts of expressiveness and instrumentality

In the Guimond et al.'s (2006) model, the link between sex and relational self-concept became non-significant when the perception of the in-group was covaried out. In the present model however the significant positive link between sex and self-concept of expressiveness (*B* = .25, *p* <.0001) indicates that women generally rate their self-concept as more expressive than men do. However, once accounting for the impact of ingroup stereotypes, this link is reversed (*z*-test: *B* = -.24, *p* <. 0001), indicating that men's self-concept of expressiveness is slightly higher once the impact of ingroup stereotype is accounted for. That is, women are generally more expressive, but only because they also hold more expressive stereotype of their ingroup. Once ingroup stereotypes are controlled for, men seem to have a slightly more expressive self-concept than women.

The analysis on the self-concept of instrumentality demonstrates a slightly different but conceptually similar pattern for male participants. Firstly, the relationship between sex and instrumentality is negative (-.14) indicating that men tend to rate their instrumental self-concept slightly higher than women. However, once accounting for the impact of ingroup stereotypes this association declines to near zero (.05, *z*-test), indicating that higher ratings on instrumental self-concept are mainly due to ingroup stereotypes rather than sex. Contrary to the analysis above, a significant reversed gender effect was not found once controlling for ingroup stereotypes. This implies that men and women generally do not seem to differ in their instrumental self-concept once accounting for their gender stereotypes. Further analysis also showed that, similarly to expressiveness, the predictive value of sex on in-group stereotype (*B* = -.37, *p* <.0001) remained highly significant when the effect of self-concept was controlled for (*B* = -.30, *p* <.0001).

Role Traditionalism

The combined scale of role traditionalism was analysed with a 2 (Gender: male, female) x 2 (Age: 13, 16) x 2 (Nationality: Finnish, English) between participants MANOVA. A significant main effect of sex was found as boys scored significantly higher than girls $F(1, 293) = 44.03$, $p < .0001$, $\eta^2 = .13$, $M_{\text{boys}} = 3.79$, $M_{\text{girls}} = 3.26$. There was also a significant main effect of nationality as the Finns scored higher than the English, $F(1, 293) = 63.22$, $p < .0001$, $\eta^2 = .18$, $M_{\text{English}} = 3.20$, $M_{\text{Finnish}} = 3.84$.

Ambivalent sexism inventory

The combined ASI was analysed with a 2 (Gender: male, female) x 2 (Age: 13, 16) x 2 (Nationality: Finnish, English) between participants MANOVA. There was a main effect of both sex and nationality on the ASI as boys scored significantly higher than girls, and the Finns significantly higher than the English. When the effects of sex, age and nationality on the two subscales were analysed separately, the effects of sex and nationality on hostile sexism mirrored the effects of those on the combined scale. On contrary, sex, age nor nationality had significant effects on the benevolent scale. The means and *F*-statistics are shown in Table 3. Scores on the hostile and the benevolent scales were weakly correlated with Pearson's $r = .17$, $p < .005$.

The relationships between measures of stereotyping

The means, standard deviations and correlations between different measures are shown in Table 4. As can be seen, the IAT score was not related to any of the other measures of sex stereotyping. There is, however, a strong correlation between the two explicit sex stereotype measures: ambivalent sexism and the role traditionalism (r = .62). Stereotypicality of self-concept was strongly correlated with stereotypicality of perceptions about men and women. There was also a moderately strong correlation between benevolent sexism and perception of women as high on expressiveness. Perception of men as high on instrumentalism was also correlated with benevolent sexism but the effect size of this correlation was much lower.

Table 3.

Significant main effects of nationality and sex on hostile sexism

	Sex effects					
	Means		F (df)	p	Partial η^2	Power
Hostile sexism	4.68 $_{\text{boys}}$	3.75 $_{\text{girls}}$	71.28 (1, 294)	<.0001	2.0	1.00
Hostile sexism	4.01 $_{\text{English}}$	4.41 $_{\text{Finnish}}$	13.03 (1, 294)	<.0001	.04	.95

Table 4.

Correlations between variables

	1	2	3	4	5	6	7
1 IAT	1						
2 Hostile sexism	-.07	1					
3 Benevolent sexism	-.04	.17**	1				
4 Role Traditionalism	-.09	.51***	.43***	1			
5 Sex-typicality	-.05	.08	.11*	.16**	1		
6 Men: Instrumental	.09	.07	.15**	.19**	.45***	1	
7 Women: Expressive	.05	-.07	.29***	.16**	.43***	.61***	1

** p <.01, *** p >.001

Finally, the extent to which variables predicted the explicit stereotyping variable ‘Role Traditionalism’ was examined. As this variable was found to be strongly affected by sex in the analysis of variance, the regression analyses were performed separately for boys and girls. Sequential regression was performed to see whether the addition of trait attitudes (sex-stereotype of men being instrumental and women being expressive, self-concepts of expressive and instrumental traits) and ambivalent sexism subscales improved the prediction of the dependent variable compared to regression analysis including nationality only. Age was not included as a predictor because it did not show any significant effects in the analysis of variance. The results of the regression analyses (after the final step) are shown in Table 5.

For both dependent variables, R was significantly different from zero at the end of each step (boys’ model R = .69 and the girls’ R = .68). When trait-related attitudes were included in the regression, for boys the only significant predictor of the dependent variable was the self-concept of expressiveness, while for girls the only significant predictor was how expressive they deemed women in general to be.

Specifically, boys that perceived themselves to be high on expressiveness conveyed less agreement with the Role Traditionalism scale while girls who deemed women in general high on expressiveness expressed stronger role traditionalism. The addition of benevolent and hostile sexism variables to models added eight per cent to the variance for boys and 27 per cent for girls. For boys, the two subscales of ambivalent sexism were equally strong predictors, while for girls benevolent sexism was slightly stronger predictor than hostile sexism. The predictors of overt stereotyping are shown in Figure 2

Table 5.

Predictors of Role Traditionalism among boys and girls (final model)

Boys: Predicting Role Traditionalism							
Model	*B*	*β*	*T*	*R*	R^2	Sig. *F* change	*DF*s
3.							
Nationality	.68	.37***	5.87				
Men Instrumental	.17	.13	1.43				
Women Expressive	.01	.01	.10				
Self: Instrumental	.15	.16	2.07				
Self: Expressive	-.20	-.20**	-2.74				
Hostile Sexism	.30	.30***	4.63				
Benevolent Sexism	.31	.29***	4.52				
				.69	.48	24.29	2, 140
Girls: Predicting Role Traditionalism							
Model	*B*	*Beta*	*T*	*R*	R^2	Sig. *F* change	*DF*s
3.							
Nationality	.41	.21***	3.13				
Men Instrumental	-.06	-.04	-.50				
Women Expressive	.49	.30***	3.47				
Self: Instrumental	-.10	-.10	-1.39				
Self: Expressive	-.17	-.13	-1.82				
Hostile Sexism	.32	.34***	5.15				
Benevolent Sexism	.41	.37***	5.40				
				.68	.47	35.77	2, 142

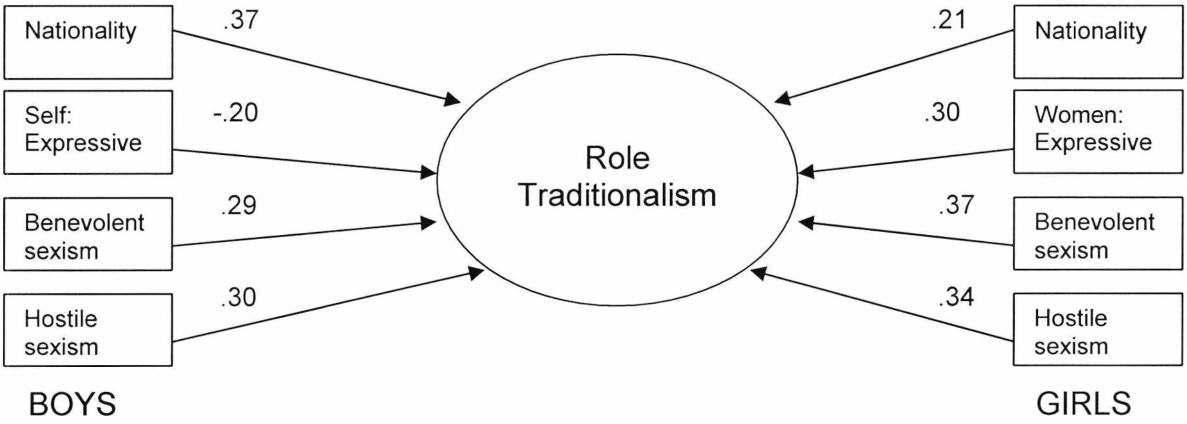
Nationality
Self: Expressive
Benevolent sexism
Hostile sexism
.37
-.20
.29
.30
Role Traditionalism
.21
.30
.37
.34
Nationality
Women: Expressive
Benevolent sexism
Hostile sexism
BOYS
GIRLS

Figure 2. Predictors of Role Traditionalism for boys (left) and girls (right)

Discussion

Study Three was designed to extend the findings of Study Two relating to the sex-stereotyping of personality characteristics. Study Three included two unique measures: the Implicit Association Test for trait stereotyping and the Ambivalent Sexism Inventory for adolescents. Furthermore, Study Three aimed to replicate the findings of Study Two, which showed the Finns to be more stereotypical than the English and boys to be more stereotypical than girls. The results of Study Three were consistent with previous studies that suggest there is dissociation between implicit and explicit measures of gender stereotyping. In Study Three, girls, who typically demonstrate less stereotypical views showed stronger stereotypical associations than boys on the implicit measures but were significantly more egalitarian on all explicit measures.

Implicit Association Test

The IAT employed in the present study differed from conventional IAT in that instead of using positive vs. negative categorisation task (e.g. fruit-good, snacks-bad), expressive vs. instrumental trait categorisation task was used where all stimuli were positive in connotation. The hypothesis that participants will be faster when grouping female names with expressive traits and male names with instrumental traits than vice versa was supported. The mean difference score (M = .17) was not, however, as strong as may have been expected based on previous IAT research where *D*-scores have averaged at .43 (Nosek et al., 2005). However, the difference score was significantly affected by presentation order which necessitated the use of *D*-score obtained from the test trials only (M = .31). This is different from the standard procedure used in IAT research where the *D*-scores from practise and test trials are routinely combined to obtain the most reliable difference score (Nosek et al., 2005).

In the present study, the *D*-score from practise trials actually showed participants in the incongruent-task-first condition to be faster when categorising concepts counter-stereotypically (M = -.24). However, also these participants were faster at categorising items stereotypically in the test trials, after getting accustomed to the new task first (M = .26). When only those participants who performed the compatible task first were included in the analyses, the mean *D*-score was significantly higher ($M_{\text{practise \& test}}$ = .57, M_{test} = .35).

The strong effect of presentation order found in the present study could be explained by three factors. Firstly, the fact that the present IAT included only positive attribution stimuli meant it was a measure of stereotyping only, while IATs that use both positive and negative valance stimuli have been confounded with ingroup bias (Black – White; Old – Young; Asian – White;

Self – Others). For example, in the Black – White IAT white participants categorising black faces with positive words and white faces with negative words first are not only doing a stereotype incongruent task, but also pairing their ingroup with negative qualities. This effect of ingroup bias could potentially diminish the effect of presentation order, as even when the stereotype congruent task is done after the incongruent task, there are two 'forces' aiding the participant to make the correct categorisation. In contrast, participants in the present study never had to pair their ingroup with negative attributes but only with different types of positive qualities. Hence, for the participants in the incongruent block first condition, the effect of rehearsing pairing the stimuli counter stereotypically would have been harder to overcome in the stereotype-congruent block thus decreasing the consequent *D*-score.

The second potential explanation is based on strong effect of presentation order also being prevalent in Gender-Science experiment, which is the only other IAT to have used non-negative attribution stimuli only (Nosek et al., 2005). Nosek et al. (2005) put forward a hypothesis that the strong effect could be due to the task using a single modality only (i.e. words) instead of the traditional picture (e.g. pictures of black and white faces) – word (e.g. 'good' and 'bad') multiple modality approach. This argument could also be applied to the IAT used in the current research and could explain the strong effect of presentation order.

The third explanation for the strong effect of presentation order could be that the personality stereotypes about instrumentality and expressiveness were not strongly endorsed by the participants, who were therefore more affected by the presentation order. In this case, the D-score between the congruent and incongruent tasks could simply be a result of stereotype knowledge among the present sample. This explanation is however made less likely by the strong stereotyping found in Study Two, and the clear differences in between the male and female stereotypes found on the explicit tasks of the present study. The ingroup bias hypothesis seems to be the most likely explanation as these processes have been shown to have a strong effect on attitudes, especially those of adolescents', in previous research (e.g. Powlishta, 1995).

The lack of correlation between the implicit score and the explicit gender stereotyping measures lends support for the advocates of 'IAT as an association' argument (e.g. Karpinksi & Hilton, 2001). It is unlikely that this dissociation could be due to social desirability effects in the explicit stereotyping measures. While it is possible that responses to the ASI and the Role Traditionalism scale were influenced by social desirability it is unlikely that this would have had an effect on the explicit gender-personality stereotyping task where participants were simply asked how well different positive qualities described a typical man and a typical woman. As Karpinski and Hilton (2001) argued, the lack of relationship between IAT results and such explicit measures of stereotyping that are not affected by social desirability are particularly damning for those advocating the 'IAT as an attitude' point of view.

Gender Differences

The findings that girls showed stronger implicit gender stereotypical association than boys was contrary to the prediction based on findings of Study Two and previous research and theory (e.g. Rudman et al., 2001). This surprising result was even stronger when examining only those participants who completed the stereotype-congruent task first. Rudman et al. (2001) found that men scored higher than women on a gender-powerfulness IAT measure, while women showed greater stereotyping on gender-warmth IAT. They speculated that these gender differences were due to both powerfulness and warmth being favourable dimensions while the opposites used in the study, weak and cold, were unfavourable. Hence, men showing greater association between men and powerfulness and women between women and warmth was confounded with the tendency of both to associate own sex with positive traits.

The surprising gender effect on the present IAT could be argued to be similar to research in ambivalent sexism which has shown that women, in some countries, score higher than men on benevolent sexism (Glick et al., 2000). Glick et al. (2000) argued this to be the case in societies with high levels of sexism where women might embrace benevolent sexism as means of seeking both protection against hostility and power in domestic domain. This sex difference was not, however, found in the present study where the sex difference in benevolent attitudes was non-significant. As girls did not score higher than boys on the benevolent sexism scale it is unlikely that the sex difference found in IAT is caused by the above reasons.

The observed gender effect on the IAT is further complicated by the explicit measures of stereotyping, which showed the predicted pattern of boys expressing more stereotypical views than girls. Specifically, in the explicit trait attribution task girls perceived women as significantly higher on instrumentality than boys did. The model proposed by Guimond et al. (2006) stated that sex-stereotyping underlines gender differences in self-concepts of agentic vs. relational dimensions. In this study the same model was tested with regards to instrumentality-expressiveness dimension, and it was found that once the ingroup stereotypes were accounted for, there was no difference in the self-concept of instrumentality. In other words, the current results showed that the sex difference in self-perception of instrumentality is fully accounted for by the stereotype of women as a group being less instrumental than men. All of these findings were in line with Spence & Buckner's (2000) hypothesis depicting a narrowing gender gap in instrumentality.

Hence, the gender effect on the implicit measure observed in the current research further suggests that the IAT used here gauged normative association rather than personal attitude. If this indeed is the case, the gender effect in the IAT could be explained by societal gender stereotypes being more strongly embedded in girls than in boys, which in turn would have made it harder for girls to pair stimuli counter-stereotypically.

Another possible reason for the found gender effect is that boys may simply be more used to performing computerized tasks similar to the present IAT. Previous research has demonstrated boys to spend significantly more time than girls playing computer games such as Play Station and Nintendo, and that this gender gap is largest during adolescence (e.g. Subrahmanyam, Greenfield, Kraut & Gross, 2001). Therefore, it may be that boys in the current sample viewed the IAT more as a 'game' and tried hard to be as fast and accurate as possible. Potentially, this may have led to them being less distracted than girls by gender stereotyping or stereotype knowledge.

The findings that girls scored lower than boys on Role Traditionalism and Hostile Sexism is consistent with the hypotheses. As Glick &Hilt (1996) argued, boys and men are more eager to hold on to traditional sex roles as they stand to loose both status and power if sex roles become more egalitarian. The sex differences found among adult samples were replicated among adolescent sample, thus validating the modified scale. The correlation between the hostile and benevolent sub scales was in line with correlations reported in previous studies (Glick et al., 2000).

The importance of benevolent sexism is highlighted by the finding that for girls, embracing benevolent attitudes is the strongest predictor of Role Traditionalism. It seems logical that girls who agree with benevolent statements that concern protective paternalism, heterosexual intimacy and complementary gender differentiation would also accept the notions echoed in the Role Traditionalism scale. Although benevolent sexism was also a predictor of Role Traditionalism for boys, the effect size was larger in the girls' model. This implies that benevolent attitudes carry a greater significance for girls than they do for boys. It may be that hostile items, due to their very antagonism towards women, are not reliable predictors for girls who, in the current sample, were reluctant to agree with them ($M_{\text{girls}} = 3.74$ on a seven-point scale). Because of this reluctance, girls who to some extent agree with traditional sex roles may be eager to agree with the benevolent items that both embrace traditional attitudes and positively differentiate women from men.

Nationality effects

The present study aimed to replicate the nationality effects found in Study Two, where Finnish children and adolescents were found to hold more traditional views about gender roles and endorse stronger sex stereotypes than the English. The present study indeed showed a similar pattern as the Finnish participants clearly displayed more stereotypical attitudes on both implicit and explicit measures. On the IAT, the Finns' *D*-score on practise trials was significantly larger than that of the English. The country difference was non-significant on the test trials but maintained significance when the practise and test trials were combined according to the standard IAT procedure. This difference suggests that the effect of presentation order was not as strong among the Finnish sample as it was among the English. This in turn indicates that the Finnish participants were less influenced by which task they did first but consistently had longer reaction times when required to pair stimuli counter-stereotypically.

The current research is also consistent with Spence and Buckner's (2000) finding that the gender gap in instrumentality is diminishing more than is the gender gap in expressiveness. In the current data set girls' scores were only marginally different from boys on self-evaluation of instrumentality and the gender gap was much larger for expressive than for instrumental traits in explicit gender stereotyping task. However, when the two countries were compared the Finnish participants rated men as significantly higher on expressiveness and women as significantly lower on instrumentality than the English. However, in Finland also, the gender gap was significantly larger for expressive than for instrumental qualities.

It could be that the nationality difference in women's perceived instrumentality is due to Finnish women being traditionally more equal with men in the labour market than the English women have been. Hence, the societal change of women entering labour market and spending less time at home may not have been as profound in Finland. Therefore, as the Finnish women's employment is viewed more matter-of-factly, the perception of their instrumentality would have remained more intact than it has in England where women have, traditionally, been more likely to stay at home.

Finnish participants also scored significantly higher on both the Ambivalent Sexism and the Role Traditionalism Scale. On the ASI, the nationality effect was a result of the Finns showing significantly stronger agreement with the hostile items as there was no significant effect of nationality on the benevolent items. The ASI has been administered to adults in number of countries but not in Finland as yet. The comparison between the current English sample and previous studies among English adults is also unreliable due to current study using a seven-point scale whilst ASI studies among adults have used a six-point scale without a neutral middle point (e.g., Glick et al. 2000, 2002). However, the found nationality effects are in line with the results of Study Two and the two studies have now consistently shown that the Finnish adolescents and boys in particular express more stereotypical gender-attitudes than do the English.

Given the reputation of Finland as the forerunner of gender equality, the nationality difference emerging in Studies Two and Three of the current research seem somewhat surprising. The results of Study One seemed to reflect the more equal standing of women in Finnish society, especially relating to working life, and greater demands for male participation in housework. Admittedly however, the Finns also expressed stronger preference for traditional family values (e.g. “People without children lead empty lives”). In light of the current findings, it seems that such traditional family values may well be connected to a more traditional perception of gender roles and the personalities of the two sexes despite the greater gender equality in terms of labour force participation and structural power. Furthermore, that the Finnish adults in the ISSP data agreed much more that than the English with the sentence “A job is alright, but what women really want is home and children” seems to be in line with the current finding of Finnish adolescents agreeing with the hostile sexism items.

Conclusions

Study Three replicated and extended the findings of Study Two in relation to the personality dimensions expressiveness and instrumentality. Specifically, speculations about the narrowing gender gap on instrumentality (Spence & Buckner, 2002) were supported among the adolescent cross-cultural sample. This pattern has important connotations for gender research as it could be argued that girls and women whose self-concept of instrumentality is similar to that of men will be more likely to compete for ‘male’ positions in society. As the results of Study Two showed, girls’ occupational aspirations are no longer less ambitious than are those of boys', albeit still focussed on different occupational sectors. It could be that the narrowing of gender gap in future aspirations (as demonstrated in Study Two) is a product of the narrowing gender gap in instrumentality demonstrated by the present results.

Contrary to predictions, the IAT employed in the Study Three showed that girls had slower responses when required to associate women with instrumental and men with expressive qualities than boys. However, this was not taken as an indication of girls being more implicitly stereotypical than boys but instead as a sign that the present IAT measured associations rather than attitudes. Hence, the observed gender effect could be explained by girls being more strongly affected by the societal norms that they do not necessarily endorse themselves. Such implicit association may, however, influence girls' decisions and future directions even if they explicitly express conflicting attitudes. The found gender effect could have potentially been caused by boys being 'better' than girls at computerised tasks such as the present IAT.

Study Three replicated Study Two's findings and showed the Finnish adolescents to express more stereotypical views than the English. This effect of nationality was observed on all measures of gender stereotyping, including the IAT where the Finns were less affected by the presentation order of the stereotype congruent versus incongruent tasks. The Finns emerging as more stereotypical and even sexist on the hostile items of the ASI and on the Role Traditionalism scale is an important finding for Finnish society as a whole, as it is used to perceiving itself as the forerunner of gender equality in international comparison.

The Finnish sample endorsing benevolent sexism more than the English would have seem more fitting as the benevolent scale emphasises the difference between the two sexes, their dependence on each other, and men's duty to protect women – sentiments which seem inherently linked to traditional family values and to perceiving the two sexes to have different personalities. Therefore, the fact that the nationality difference emerged on the hostile rather than on benevolent items highlights the need to conduct further research employing the ASI among Finnish samples.

Chapter 7: Role-based evaluations of men and women: Extending the research on instrumentality and expressiveness

This chapter presents the fourth empirical study of the thesis. The aims of Study Four were threefold. Firstly, Study Four extended the research on gender stereotyping along the personality dimensions of expressiveness and instrumentality. Specifically, Eagly's Social Role Theory was tested by studying the degree to which participants attributed instrumental and expressive qualities to men and women in different occupational positions. Secondly, Study Four aimed to further the findings of Study Two relating to occupational gender stereotyping. This was done by investigating adolescents' assumptions about gender and managerial versus subordinate occupational roles. The third objective of Study Four was to replicate the findings of Study Three and thereby validate the Ambivalent Sexism Inventory for adolescents. In Study Three, ambivalent sexism in adolescents was shown to be moderated by gender and nationality and the present research attempted to replicate this finding.

Eagly's Social Role Theory: Instrumentality and expressiveness

Eagly (1987) introduced Social Role Theory (SRT), which argued that actual sex differences in personality and abilities stem from the roles men and women play in society (see Eagly, 1997; Eagly & Wood, 1991; Eagly, Wood, & Diekman, 2000). In line with other theories and research on gender (see Ch. 1 and 2), a key proposition of SRT is that the majority of beliefs about the sexes relate to *communal* and *agentic* attributes (Bakan, 1966; Eagly, 1987).

Communal attributes correspond to expressive qualities and agentic attributes to instrumental qualities that have been previously discussed in this thesis. According to SRT, communal qualities (or expressive characteristics) are attributed more strongly to women than to men and describe a concern with the welfare of other people. In contrast, agentic attributes (or instrumental characteristics) are ascribed more strongly to men and describe an assertive, controlling and confident predisposition.

The underlying premise of SRT is that men are more assertive and aggressive because they have historically been responsible for providing, protecting and leadership. According to the theory, women, as a group, have not developed instrumental personality characteristics to the same extent because they have not played roles where such qualities are needed. Instead, since they have been chiefly responsible for home-making and raising children, they have developed nurturance and compassion. SRT also asserts that children and adolescents are likely to develop these gender-appropriate traits while rehearsing, anticipating and preparing for their future roles (Eagly, 1987, p. 21; see Chapter 2).

In short, Eagly (1987) asserted that the division of labour between the sexes creates gender-role expectations, which in turn lead to actual sex differences in both personality and behaviour. Thus, SRT argues that a shift in either sex's roles will change gender-role expectations and this will eventually lead to changes in actual personalities. For example, as women's increasing entry to the labour market has made them more equal to men in terms of providing, SRT would argue that expectations about women's roles have also changed. As the role expectations, at least in terms of providing, have become more similar to those for men, SRT would expect that women's actual personalities have become more instrumental, and hence more similar to men. This argument is supported by Spence and Buckner's (2000) work, which showed that the gender gap in self-perceptions of instrumentality has indeed decreased. Furthermore, the narrowing gender gap in instrumentality was also evident in Study Three of this thesis.

Social Role Theory posits that gender stereotypes are also a result of men and women's differential distribution into social roles (Diekman & Eagly, 2000; Eagly & Steffen, 1984, 1986; Eagly et al., 2000). As the two sexes occupy different roles, men and women are assumed to have characteristics that equip them to adequately function in their traditional roles. Thus, the characteristics required in traditional roles become stereotypic of each sex. Consistent with this argument, Hoffman and Hurst (1990) demonstrated that stereotypes about novel groups stem from the type of work each group typically performs. For example, an unfamiliar group described as stuntmen would be deemed brave and boisterous, but an unfamiliar group described as carers for babies are expected to be compassionate and loving.

Eagly & Karau (2002) emphasised that an important aspect of SRT is that roles include two kinds of expectations or norms. First, roles include descriptive norms, which are expectations about what members of a group actually do. Second, there are injunctive norms, which are expectations about what a group of people ought to do or ideally would do. Hence, descriptive norms are equivalent with the usual definition of stereotypes of group members, while injunctive norms add a prescriptive element not traditionally included in the concept of a stereotype (Eagly & Karau, 2002).

However, it is important to also consider the multiple roles held by human beings. We are not just men and women, but hold a number of roles such as being a student, Asian, manager, Christian. Some of these roles are more important than the others for the construction of our identities. Indeed, studies examining perceptions of women and men have found that other roles can override the effects of gender (Eagly & Steffen, 1984). For example, occupational status has been found to strongly influence how people are perceived by others. Research has shown that purely describing a woman as an employee increases the number of instrumental qualities assigned to them (Eagly & Steffen, 1984, 1986; Eagly et al., 2000). Similarly, men portrayed as homemakers are assigned significantly more expressive qualities than other men (Eagly & Steffen, 1984, 1986; Eagly et al., 2000).

SRT & Instrumentality vs. Expressiveness: Effects on status, power and authority

As discussed above and in previous chapters in this thesis, women are generally judged to be more expressive (e.g. caring, dependent) and less instrumental (e.g., ambitious, achievement-oriented) than men. These gender stereotypes do not only rationalise the existing division of labour but could also explain why men exercise more power in society than women. If men are believed to be stereotypically more competitive, dominant and assertive then it appears logical that they should also be perceived to be better suited to being managers, army officers and CEOs than timid, gentle and reliant women.

Similarly, women's expressive characteristics make them better suited to positions in caring, serving and grooming (e.g., Fiske et al., 2002; Jackman, 1994). The very positivity of expressive stereotypes works both as a shield towards change and justification for the power differential as expressiveness lends itself better to being a subordinate than a leader. In other words, as long as women are perceived chiefly as having positive expressive traits, they will not be deemed suitable for leadership roles that require 'more negative' instrumental qualities such as aggression and egocentricity.

These stereotypes of men and women together with the associated occupational roles could be argued to form the foundation on which occupational segregation is based. In terms of the current research, it is important to assert how these stereotypes are perceived by the adolescents in the two countries under examination, both of which are characterised by a strongly segregated labour market.

As stated above, it could be argued that women's entry to the labour market and their increasing equality in terms of providing could diminish the gender gap in leadership and positions of authority. Indeed, endorsement of gender egalitarian attitudes, which typically emphasise women's access to public roles, has consistently increased since the 1970s (Spence & Hahn, 1997; Twenge, 1997). According to public opinion data, the percentages of people who favoured the feminist attempt to raise women's status almost doubled from 1970 to 1994 as the numbers rose from 40 to 78% among women and from 44 to 71% among men (Huddy, Neely & Lafay, 2000). However, this data should be interpreted with some caution as it is possible that while people are more willing to agree that women should enjoy personal freedom and individual power they may remain negative toward women's direct power over others in political or occupational settings.

Indeed, Schein's (1973, 1975 in Eagly & Karau, 2002) early studies of leadership perceptions showed that when male and female managers were asked to give their impressions of successful middle managers they consistently perceived them as more similar to men than to women on a large number of mainly instrumental characteristics such as competitive, self-confident, objective, aggressive, ambitious and able to lead. These findings have been replicated not only in the United States (e.g., Heilman, Block, Martell, & Simon, 1989; Massengill & di Marco, 1979), but also in the United Kingdom, Germany, Japan, China, and Singapore (Schein, 2001) hence suggesting that the perception of authority as a masculine construal is shared by different cultures across the world.

In the 21st century women are still vastly under-represented at the highest levels of leadership (Eagly & Karau, 2002). For example, a quick inspection of the gender of heads of states reveals that in 2006 only 19 out of the 191 member states of the United Nations had a female head of state, out of whom 13 had been elected by popular vote (i.e. elected rather than inherited position). The continuous lack of women in high status roles is particularly striking in the light of the educational statistics demonstrating that over the past 30 years college women have more and more frequently chosen degrees related to high-power careers (Astin, Parrott, Korn & Sax, 1997).

Perceptions of males and females in positions of power

An important issue relating to vertical segregation (see Chapter 3, p. 80 for definition of vertical segregation) is the perception of men and women in different occupational roles. Empirical evidence has demonstrated that people react more negatively to women than to men in powerful positions (Glick & Fiske, 1996, 2001; Goodwin & Fiske, 2001). Glick and Fiske (1996) have explained this phenomenon in terms of their Ambivalent Sexism Theory (see Chapter 1 for description of the theory). They argue that negative reactions to women in powerful positions stems from hostile sexism where women in non-traditional roles are especially devalued. In contrast, they argue that women in traditional roles are particularly valued because of benevolent sexism, which emphasises gender differentiation and women's dependence on men.

Eagly & Karau (2002) explain the difference in attitudes towards women and men in positions of power by arguing that because the masculine gender role is compatible with a position of power, men in positions of authority do not violate their gender norm. In contrast, powerful women must balance the demands of their gender norm with the norms relating to their powerful occupational role. However, Eagly & Karau (2002) also argue that perceiving female leaders as very similar to their male counterparts may actually be detrimental to women due to the injunctive norms associated with the female gender role. They assert that because effective female leaders tend to violate standards for their gender when they manifest male-stereotypical, instrumental attributes rather than traditional feminine attributes, they will be negatively judged for their gender role violation, at least by those who endorse traditional gender roles.

The negative reaction towards women in positions of power reflects the general tendency for deviations from injunctive norms to elicit disapproval (Cialdini & Trost, 1998). For example, Heilman et al.'s (1995) found that when female managers were described by researchers as being successful, participants regarded them as more hostile and less rational than successful male managers.

Individual differences in social perceivers may also influence the incongruity between leader and gender roles. One such variable is perceivers' sex, as empirical evidence suggests that men have a more masculine construal of leadership than do women (Eagly & Karau, 2002). In support of this view, Schein's (2001) review of research in gender and leadership showed that in the United States women, compared with men, generally have a more androgynous view of managerial roles as requiring expressive qualities as well as instrumental ones. However, according to Schein (2001) this effect has not been replicated in several other nations including the United Kingdom, Germany, Japan and China, where men and women shared similarly masculine instrumental perceptions of people in managerial roles.

As Eagly & Karau (2002) argued, if men indeed hold a more masculine perception of leadership than women, then men are perhaps more likely than women to view women as less qualified for leadership. Furthermore, as men arguably hold more structural power than women, their tendency to use gender-stereotypical information rather than available individuating information is likely to be stronger than that of women (Goodwin, Operario, & Fiske, 1998). Using stereotyped information is, in turn, more likely to enhance the view of women as being less suitable for leadership than men.

However, many studies have found that the two sexes react equally negatively to female authority figures. Simmons (2001) found that across 22 nations surveyed in 1995, both males and females showed a strong preference for male bosses over female bosses. Using implicit measures, Rudman & Kilianski (2000) primed student participants with drawings of male or female authority figures (e.g., doctor, manager, judge) and assessed latency of response to positive or negative adjectives. They found that both male and female students held negative attitudes toward female authority figures but neutral attitudes toward male authority figures. In contrast, on an explicit measure of preference for female vs. male authorities women showed less prejudice towards female leaders than did men.

In summary, empirical evidence suggests that resistance to female leaders is a robust phenomenon both in and out of laboratory and female leaders appear to encounter harsher reactions than their male counterparts. The effect of this negative reaction to female leaders on women's opportunities in the labour market is clear. As illustrated in Eagly & Karau's (1991) meta-analysis, it appears that in a world in which women in authority are viewed negatively, men are more likely than women to emerge as leaders (Eagly & Karau, 1991).

Children & Adolescents' perceptions of occupational competency and the earning power of men versus women

The above literature review highlights how important traditional gender roles have been for defining stereotypes of men and women, and how perceptions of men and women vary as a function of their roles. It seems that men and women's competencies are evaluated along the dimensions of expressiveness and instrumentality, and that violation of the conjunctive norm by demonstrating qualities incongruent with one's sex are more likely to result in a negative rather than a positive response. As children learn their gender expectations and stereotypes from their society, it can be expected that their perceptions of personality traits, appropriate roles and competencies of the two sexes mirror those of adults.

The results of Study Two suggest that Finnish and English children and adolescents hold strong occupational gender stereotypes, and very rarely aspire to an occupation that is 'for the other sex'. However, although girls were not going to be builders or boys beauticians, the occupational aspirations of girls and boys in Study Two did not differ in their prestige, power or occupational status. These findings imply that while girls and boys differ in the type of occupation they aspired to (horizontal stereotyping) they do not necessarily differ in the status of their chosen occupation (vertical stereotyping).

With regards to perceived competency of men and women in gender-consistent or inconsistent occupations, previous research has consistently shown that children, similarly to adults, deem women to be less competent than men in traditionally masculine domains such as skilled trades or corporate management while men are deemed less competent at feminine occupation such as nursing or infant care (Boldry, Wood, & Kashy, 2001; Heilman, 2001). Overall, Levy, Sadovsky and Troseth (2001) found that, consistent with findings among older children and adolescents (Eccles, 1992, 1994), young children viewed men as more competent than women in masculine occupations, and women as more competent than men in feminine occupations.

Levy et al. (2000) argued that children's perceptions of competency are important because they are likely to be internalised into perceptions of personal competencies in different occupations as well as in schoolwork. In their study they investigated how children thought they would feel about holding gender role consistent and inconsistent occupations as adults. Importantly, the occupations used as stimuli were equally prestigious occupations that are traditionally viewed as men or women's jobs. Levy et al. (2000) found that, consistent with previous research (e.g., Eccles et al., 1999; Eccles, 1994; Levy et al., 1995), primary school children expressed greater positive affect (i.e., happiness) at the prospect of growing up to have a gender-role-consistent occupation than a gender role-inconsistent one.

In addition, Levy et al. (2000) found that even pre-school aged children were aware of the differences in earning power for men and women in gender-typed occupations. Overall, participants perceived men and women to be earning more money than other-sex counterparts in their respective gender-role-consistent occupations. As Levy et al. (2000) pointed out, in reality this perception only holds true with regard to masculine occupations, as men in "women's jobs" actually earn more than women. Overall, Levy et al. (2000) found that children were accurate in rating masculine occupations as higher in earning power than feminine ones.

To summarise, previous research has shown that even young children have a rather sophisticated understanding of occupational gender stereotypes and hold stereotyped views of the competency of men and women in different occupations. Furthermore, children seem to be aware of the pay gap between men and women and accurately perceive men to earn more money than women. The present study sought to further investigate adolescents' gender stereotypes relating to vertical segregation of occupations. More specifically, Study Four further investigated whether adolescents believed that men are more suited to be managers and women subordinates.

Present Study

The key aim of the present study was to investigate Social Role Theory's (Eagly, 1987) assumption that roles people hold predict the way they are perceived by others and to test whether this is applicable to perceptions of instrumentality vs. expressiveness. Specifically, Study Four was designed to examine whether adolescents perceive men and women differently depending on whether they occupy a managerial or subordinate position. Consistent with Study Three, Study Four also measured participants' self-perceptions of expressiveness and instrumentality in an attempt to replicate the sex effects found in Study Three, and in order to study the relationship between self-perceptions and perceptions of men and women in different social roles.

Study Four also attempted to extend the findings of Study Two relating to occupational stereotypes expressed by children and adolescents. Study Two demonstrated the prevalence of these stereotypes but also showed that in terms of prestige or social status there was no difference between girls and boys' aspirations. Study Four extended these findings by testing whether the occupational stereotype of men as being more suitable than women for managerial positions was endorsed by adolescents. To improve the reliability of the measurement of this gender stereotype, both implicit and explicit methods were employed.

The results of Study Three showed significant nationality and sex effects on the Ambivalent Sexism Inventory. Finnish adolescents were found to agree significantly more than the English with the hostile subscale of the ASI. This finding has implications for the cross-cultural use of the scale and for Glick et al.'s (2000) theories regarding ambivalent sexism. Previous cross-cultural work (Glick et al., 2000, 2004) on the ASI has empirically demonstrated a negative correlation between ASI scores and the position of women in the society (as measured by the UN's Gender Empowerment Index, see Ch. 3, p. 72). However, given that Finland is near the top of the table on gender empowerment, and significantly higher than the UK, it appears that Glick et al.'s hypothesis cannot account for the cross-cultural trends observed in Study Three. Given that Study Three used an adapted version of the ASI for adolescents that had not been used before, Study Four attempted to replicate this result. In order to do this, the sample in Study Four consisted of Finnish and English adolescents of similar ages to that used in Study Three.

Predictions

In line with Social Role Theory it was predicted that the occupational role of a person will interact with their sex in determining the extent to which they are presumed to have expressive and instrumental qualities. More specifically, it was expected that a woman in a managerial position would be deemed more instrumental and less expressive than a woman in a subordinate position and that a male portrayed as an assistant would be considered as more expressive and less instrumental than a male manager.

However, as SRT has argued that sex is an especially important role for children and adolescents due to lack of competing roles (see Ch. 2, p. 52), it was predicted that participants would rely on sex more than on occupational role when evaluating how instrumental or expressive the target individuals are. Therefore it was hypothesised that the female portrayed as a manager would be deemed more similar to the female assistant than to the male manager, and that the male portrayed as an assistant would be deemed more similar to the male manager than the female assistant.

The measures of vertical occupational stereotyping were expected to show a stronger association between men and managerial positions and women and subordinate positions. In other words, it was expected that participants would be more likely to assume that men apply and are selected for managerial roles and women for subordinate positions rather than vice versa. This hypothesis was tested with both implicit and explicit measures of gender stereotyping and it was expected that these measures would be positively correlated. However, as previous research has shown men to hold more masculine perception of leadership than women, it was expected that girls would show less gender stereotyping than boys. Boys were also expected to score higher than girls on the hostile sexism. It was also hypothesised that there would be a positive correlation between the scores on the ambivalent sexism subscales and on the occupational stereotyping measures.

The results of Study Two and Three showed that the Finnish participants scored higher on measures of gender stereotyping and role traditionalism than the English participants. However, as the results of Study Two only showed the Finns to view occupations stereotypically regarding *horizontal* segregation and as the proportion of female managers is similar in Finland than in the UK[16], no nationality effects were expected to emerge on the *vertical* stereotyping measures of managerial versus subordinate roles. In contrast, the Finns were expected to score higher than the English on the hostile subscale of the ASI.

Method

Participants

The participants were 304 adolescents from the UK and Finland. Two age groups were included in the study: 12 -13 year olds (mean age: 153.52 months, 12.8 years) and 15-16 year olds (mean age: 188.73 months, 15.7 years). From this point onwards, the younger age group will be referred to as 13 year olds and the older age group as 16 year olds. The English participants were recruited from a secondary school in Kent while the Finnish participants were recruited from a secondary school located in a suburb near Helsinki. The distribution of boys and girls within each age group in the two countries is shown in Table 1.

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[16] In 2004, 34% of the UK's managers were female compared to 28% in Finland. However, 19% of the members of daily executive bodies in top 50 publicly quoted companies were women in Finland in 2005, compared to 12% in the UK. All figures are from European Commission's Report on Equality between women and men (2006).

Table 1.

The age, sex and nationality distribution of the participants

	UK		FINLAND		
	Boys	Girls	Boys	Girls	Total
13 year olds	39	37	48	44	168
16 year olds	38	34	25	39	136
Total	77	71	73	83	**304**

Procedure

Parents of all pupils from the two age groups in participating schools were sent an information letter that explained the purpose and the procedure of the study. They were asked to return an 'opt-out' slip to the school if they did not want their child to participate in the study. No slips were returned, so on the day of the data collection, all pupils present filled in the questionnaires as a class activity under the supervision of a teacher. The pupils were instructed to complete the questionnaire independently and in silence. The questionnaire was originally designed in English and subsequently translated into Finnish by the researcher. The initial translation was back-translated by an independent person proficient in both languages. Measures included in the questionnaire can be seen in Appendix 3.

Pilot-study

In order to obtain photos that were as neutral and similar to each other as possible, a pilot study was carried out. Twenty adolescents aged between 12 and 16 were presented with 34 black and white photographs of people's faces

(17 men and 17 women). They were asked to rate the people pictured on attractiveness, age, success, happiness, wealth and 'niceness' on a seven-point scale. All the people pictured were white Europeans aged between 30 and 40 years. All had a neutral facial expression and wore smart-casual clothes. Based on the analysis of the pilot-data, ten photos (of 5 men and 5 women) that were rated as being closest to the mid-point on all the scales, and not significantly different from each other on any attributes, were selected for the final questionnaire. In the final questionnaire the use of photos was counter-balanced so that all pictures were used equally for different tasks and for different roles.

Questionnaire Measures

Implicit Occupational Stereotyping Participants were presented with the following vignette:

"Zelafeld" is a successful company that is currently looking for two new people to work for them. Please read the following job descriptions to find out what kind of people they are looking for:

Administrative manager (Annual salary £30k)
The successful candidate will direct the work of large number of staff involved in management and personnel selection. Job responsibilities include budget preparation, management of staff and information systems.

Administrative assistant (Annual salary £15k)
The successful candidate will perform office functions including answering phones, using electronic mail, filing documents, maintaining calendars, making travel arrangements, and collecting and distributing mail.

Participants were then presented with pictures of three men and three women and given the following instructions:

Three of the people pictured below have applied for the job as a manager, and the other three for the job as an assistant. All six are aged between 30 and 35. Look at the pictures, and think which three applied for the job as an assistant and which three for the job as a manager. Write either 'A' for assistant or 'M' for manager under each picture.

A measure of implicit occupational stereotyping was obtained by calculating the number of men and women assigned to each of the roles. To obtain a score, the number of female applicants assumed to apply for the assistant's role and the number of male applicants assumed to apply for the manager's role were added together. Hence, the higher the score on the resulting scale (anchored by 0 and 6), the stronger the participant's implicit gender stereotyping.

Explicit Occupational Stereotyping Next, the participants were asked who they, personally, would hire as a manager and as an assistant. The scores on this three-point scale were derived by calculating the number of gender stereotypical decisions made by the participants (i.e. hiring a male as a manager and a female as an assistant). The higher the score, the stronger the participant's explicit occupational stereotyping.

Assumptions of societal occupational gender roles The participants were asked who they thought the company will hire as a manager and as an assistant. The responses served as a measure of assumed societal occupational gender roles. This was obtained by calculating the number of gender stereotypical decisions the participant presumed the company would make. A higher score indicated stronger belief in society functioning along the traditional gender lines.

Evaluation of target individuals Next, participants were presented with pictures of four people who already worked at "Zelafeld's"; two (a male and a female) were administrative managers and two (a male and a female) were administrative assistants. The participants were asked to think what kind of people they were and had to rate them on a number of attributes. The ratings of the four people were performed on separate pages and the order of the evaluations was counterbalanced.

First, the participants were asked to rate the people on six expressive and six instrumental traits on a seven-point Likert-type scale (as in Study Three). The expressive traits were: kind, loving, caring, unselfish, emotional, and helpful; and the instrumental traits were: competitive, ambitious, assertive, determined, confident and successful.

Next, the participants were asked how successful the characters were, how good they were at their job, how much money they earned, how much they enjoyed their job and how typical of their sex they were. All the ratings were carried out on a seven-point Likert-type scale. In order to eliminate any effects due to characteristics of people in the photos, the order of pictures was reversed for half of the participants. Hence, the male and female portrayed as managers to half of the participants were portrayed as assistants to the other half.

Self-concept of instrumentality and expressiveness In this task, participants were asked: 'What kind of person are you?' and presented with the same expressive and instrumental traits that were used to evaluate the employees. They rated themselves on each of the 12 items on a seven-point scale. The items formed reliable scales for expressive qualities and instrumental qualities (Cronbach's alpha = .77 and.81, respectively).

Assumptions about own occupational success Participants were asked to speculate about their own future. They were asked how successful and how good at their job they will be, how much money they will earn and how much they will enjoy their work. All items were measured on a seven-point scale. The three success-related items (success, ability at job and earnings) were combined into a single measure. The reliability of this measure was good with Cronbach's alpha of .84.

Ambivalent Sexism The ambivalent sexism inventory developed and tested in Study Three was used. As in Study Three, the reliability analysis for the ambivalent sexism scale suggested that reliability could be improved by removing the reversed scored item from the analysis. After the removal of this item from the analysis, the Cronbach's alpha was .66 for the hostile scale and .56 for the benevolent scale. These values are similar to those reported by Glick et al. (2000) in their 19-nation study.

Results

Implicit gender stereotyping

On average, participants assumed four out of six applicants to apply for a gender-stereotypical role (i.e., men to managerial, women to assistant's role). The data was then subjected to a 2 (country) x 2 (gender) x 2 (age) univariate analysis of variance which showed a main effect of country: $F(1, 288) = 6.94$,

$p < .01$, $\eta^2 = .02$, with the Finnish participants showing more stereotypical assumptions ($M_{English} = 3.76$, $M_{Fin} = 4.10$). There was also a main effect of sex as boys were more stereotypical than girls, $F(1, 288) = 8.63$, $p < .005$, $\eta^2 = .03$ ($M_{boys} = 4.12$, $M_{girls} = 3.74$). This main effect was qualified by a significant interaction between age and gender, $F(1, 288) = 8.04$, $p < .005$, $\eta^2 = .03$. A further *T*-tests for each sex separately showed that older boys' assumptions were more stereotypical than the younger boys', $t(141) = -.2.53$, $p < .01$, $M_{13} = 3.84$, $M_{16} = 4.31$. The older girls' assumptions were less stereotypical than were the younger girls' but the difference was not significant, $t(151) = 1.01$, p <.ns, $M_{13} = 3.85$, $M_{16} = 3.56$.

Explicit Stereotyping

Measures of explicit stereotyping were subjected to a 2 (Gender: male, female) x 2 (Age: 13, 16) x 2 (Nationality: Finnish, English) between participants MANOVA. Overall, 62.36% of the participants chose a man for the manager's job, and 79.9% a woman for the assistant's job. Multivariate analysis of variance showed a significant main effect of nationality as the Finnish participants were significantly more likely to choose a man for the manager's job, $F(1, 289) = 8.60$, $p < .005$, $\eta^2 = .03$. There was also a significant main effect of sex as the girls were much more likely than boys to select a woman for the manager's post, $F(1, 289) = 37.85$, $p < .0001$, $\eta^2 = .12$.

The explicit stereotyping measure can also be used as a measure of ingroup bias. Ingroup bias is indicated by participants' selection of their own gender for the higher status occupation. Ingroup bias was examined separately in boys and girls in each country. In England, both sexes showed clear ingroup bias as 67.5% of the boys chose a man for the manager's job, and 58.6% of the girls a woman. In Finland, 90.1% of boys and 50.6% of girls chose a man as a manager, compared to 9.9% of boys and 49.4% of girls who chose a woman.

Assumptions of societal occupational gender roles

In general, participants' assumptions about who the company will hire for the different positions were very stereotypical with 75% of participants assuming that the company will choose a male candidate for the manager's post, and 80.3% assuming that a female candidate will be hired as an assistant. A 2 (country) x 2 (sex) x 2 (age) ANOVA showed that there were no significant effects of age, nationality or sex on these assumptions.

Role-based evaluation of characters

Evaluations of the four characters (female manager, male manager, female assistant and male assistant) were first analysed for any effects of the pictures used. As there were no significant effects of pictures on any of the evaluations, the evaluations of the female manager, the male manager, the female assistant and the male assistant were treated as one variable in subsequent analysis. The means of character ratings are shown in Figure 1.

The evaluations of the male and female targets were first examined for any effects of occupation (i.e. sex-congruent or sex-incongruent occupation) on the perceived personality traits (expressiveness and instrumental qualities), successfulness, competency in their occupations, liking for their occupations and typicality for their sex. Paired samples T-tests showed that for expressive traits, the male assistant was rated highest on this scale (*M* = 5.16), followed by the female assistant (*M* = 4.86) and the male manager (*M* = 4.75). The female manager was rated the lowest (*M* = 4.49). All the above means were significantly different from each other (*p* < .0001) except for the male manager and the female assistant ratings, which were not significantly different (*p* = .84).

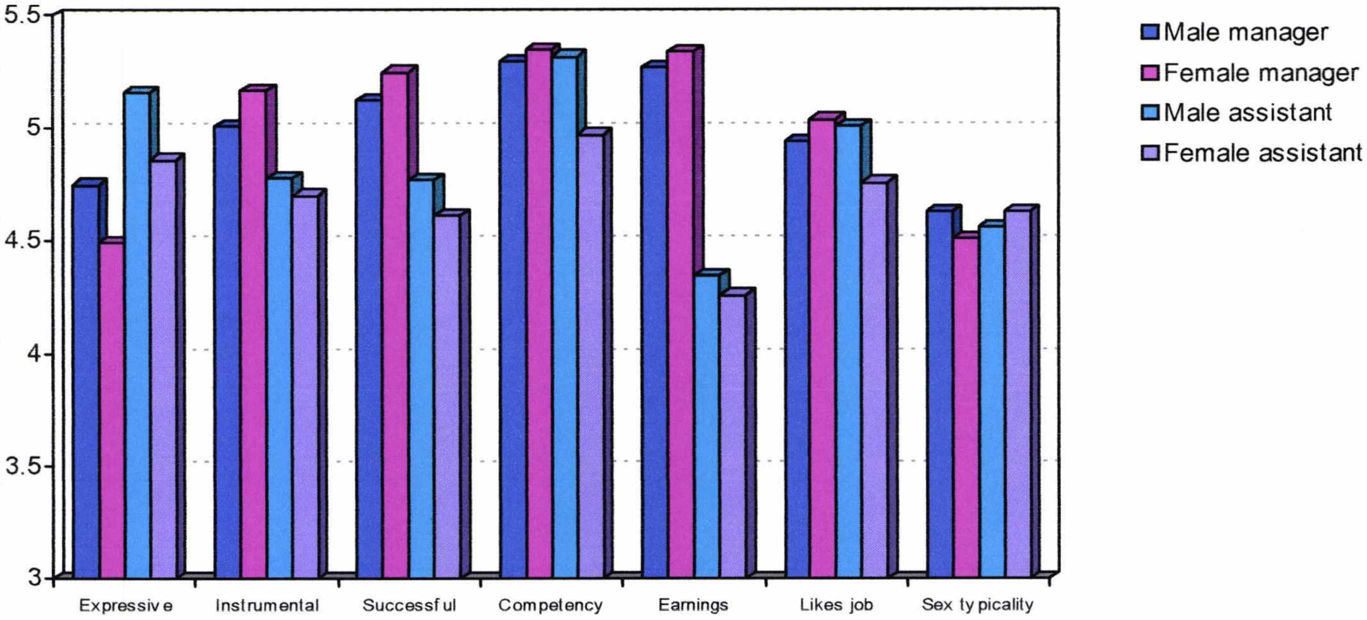

Figure 1. Ratings of the target characters

Contrary to the expressive qualities, on instrumental qualities the female manager was rated the highest (*M* = 5.16), followed by the male manager (*M* = 5.04), the male assistant (*M* = 4.78), and the female assistant (*M* = 4.71). Neither the male and the female managers', or the male and the female assistants' ratings differed significantly from each other. A paired samples T-test showed that there was a significant difference between the ratings for the female manager and the female assistant *t*(288) = 5.94, *p* <.0001, and the ratings for the male manager and the male assistant, *t*(287) = 3.55, *p* <.0001.

The ratings on successfulness mirrored the ratings on the instrumental qualities as the female manger was rated as the most successful and the female assistant was perceived to be the least successful. Again, a T-test showed that there was a significant difference between the ratings on successfulness of the female manager (M = 5.25) and the female assistant (M = 4.61), $t(296)$ = 6.85, p <.0001, and between the ratings of the male manager (M = 5.13) and the male assistant (M = 4.77), $t(296)$ = 3.91.

The female manager (M = 5.35), the male manager (M = 5.3) and the male assistant (M = 5.32) were rated equally on job competency, while the female assistant (M = 4.97) was rated significantly lower than the others (p > .001). Both the female (M = 5.34) and the male manager (M = 5.27) were assumed to earn more money than the male (M = 4.35) or the female assistant (M = 4.25). T-test showed that there was a significant difference between the ratings for the female manager and the female assistant $t(297)$ = 11.5, p <.001, and between the ratings for the male manager and the male assistant $t(295)$ = 10.08, p <.001.

Both characters in sex incongruent roles, i.e. the female manager (M = 5.03) and the male assistant (M = 5.02) were thought to like their jobs more than those in sex congruent roles, i.e. the male manager (M = 4.94), and the female assistant (M = 4.76). There were also significant differences between the ratings for the female manager and the female assistant, $t(297)$ = 2.79, p<.005, and between the ratings for the male assistant and the female assistant, $t(294)$ = -2.84, p <.001. On the contrary, the characters in sex-congruent roles were rated as more typical of their sex than those in the sex-incongruent roles but the differences in these ratings were not significant.

A three-way 2 (Gender: male, female) x 2 (Age: 13, 16) x 2 (Nationality: Finnish and English) between participants MANOVA was used to explore the effects these IVs had on the character ratings. There were no significant effects of sex on any of the ratings, but age had a significant effect on the ratings of the male characters. The older age group rated the male manager to be less expressive, and the male assistant less successful and instrumental than the younger participants (means and *F*-statistics are shown in Table 2).

Table 2.

Significant main effects of nationality, sex and age on character ratings

Age effects					
	Means		*F* (df)	*p*	Partial η^2
	13	16			
Male manager – Expressive	5.04	4.69	7.41 (1, 258)	>.01	.03
Male assistant – Instrumental	4.93	4.58	9.55 (1, 258)	>.005	.04
Male assistant – Successful	4.94	4.54	8.53 (1, 258)	>.005	.03
Nationality effects					
	Means		*F* (df)	*p*	Partial η^2
	English	Finnish			
Female manager – Competent	5.63	5.14	11.40 (1, 258)	<.001	.04
Female manager – Typical of sex	4.41	4.88	7.64 (1, 258)	<.01	.03
Male manager – Expressive	4.57	5.16	22.19 (1, 258)	<.0001	.08
Male manager – Likes job	4.67	5.20	11.80 (1, 258)	<.001	.04
Female assistant – Earns a lot	4.02	4.54	11.07 (1, 258)	<.001	.04
Female assistant – Likes job	4.35	5.09	19.7 (1, 258)	<.0001	.07

There were significant differences between the Finns and the English on the ratings of female manager's competency and sex typicality, on the ratings of male manager's expressiveness and job satisfaction and on the ratings of female assistant's earnings and job satisfaction. The English rated the female manager significantly higher on competency but significantly lower on sex typicality than the Finns. The Finns rated the male manager as significantly higher on expressiveness and job satisfaction and the female assistant as significantly higher on earning and job satisfaction.

Self-ratings on instrumental and expressive traits

Self-ratings on instrumental and expressive traits were subjected to a three-way 2 (Gender: male, female) x 2 (Age: 13, 16) x 2 (Nationality: Finnish and English) between participants MANOVA. A significant main effect of sex was found on self-ratings of instrumentality and expressiveness as boys scored higher than girls on instrumentality, $F(1, 282) = 8.78$, $p <.002$, $\eta^2 = .03$ ($M_{\text{boys}} = 5.45$, $M_{\text{girls}} = 5.12$), while girls scored higher on expressiveness: $F(1, 282) = 9.93$, $p <.001$, $\eta^2 = .03$ ($M_{\text{boys}} = 5.09$, $M_{\text{girls}} = 5.42$). There were no significant main effects of country or age.

Ambivalent sexism

Scores of the ASI subscales were subjected to a three-way 2 (Gender: male, female) x 2 (Age: 13, 16) x 2 (Nationality: Finnish and English) between participants MANOVA. For benevolent sexism, analysis showed a significant main effect of age as younger participants scored higher than older, $F(1, 284) = 13.61$, $p <.0001$, $\eta^2 = .05$, $M_{13} = 4.75$, $M_{16} = 4.35$. There were no significant main effects of country or sex. For hostile sexism, there were significant main effects of both sex $F(1, 284) = 66.41$, $p < .0001$, $\eta^2 = .19$ and nationality $F(1, 284) = 5.147$, $p < .05$, $\eta^2 = .02$. Across the two countries, boys scored higher than girls ($M_{\text{boys}} = 4.79$, $M_{\text{girls}} = 3.89$) and overall the Finns expressed higher hostile sexism than the English ($M_{\text{England}} = 4.21$, $M_{\text{Finland}} = 4.46$).

Assumptions about own future

Regression analyses were performed to explore the predictors of assumptions of own future success. As boys scored significantly higher on this scale ($t(294) = 3.03$, $p < .005$), analyses were performed separately for the two sexes. In both models nationality and age were entered first in order to control for their potential effects. However, they did not have a significant effect on the dependent variable in either model.

Next, self-perception of instrumentality and expressiveness were entered into the models resulting in a significant change in the model for both the male and female analysis. For boys, the R^2 after the second step was .38 ($R = .62$), and for the girls $R^2 = .35$ ($R = .59$). However, for both boys and girls only the self-perception of instrumentality accounted for a significant proportion of the variance in both models, with $\beta = .59$, $p < .0001$ in the boys' model and $\beta = .48$, $p < .0001$ in the girls' model. In the third and final step, the scores on the ASI subscales hostile and benevolent sexism were added into the models. The addition of these variables did not add to the prediction in boys' model, but for girls significantly increased the variance explained, $R^2 = .43$ ($R = .66$). However, only the score on benevolent sexism was significant in the girls model with $\beta = .32$, $p < .0001$. Score on hostile sexism was not a significant predictor.

Discussion

The results of the present study show that at the beginning of the twenty-first century young people continue to view managerial and subordinate roles along gender stereotypical lines. By and large, participants in the present study viewed men as more likely to be managers than women, and women as more likely to be assistants than men. These gendered assumptions were evident despite the use of gender neutral job titles of 'administrative manager' and 'administrative assistant', which were portrayed to participants in short job descriptions as neither particularly exciting nor glamorous. However, the key virtues of being either a manager or an assistant, and the clear disparity in the offered pay seem to have provided enough information to make these two rather mundane jobs appear to be a man's versus a woman's job.

The implicit measure showed that, as predicted, boys were more likely than girls to assume that the individuals presented will apply for a sex stereotypical jobs. It was predicted that there would be no nationality differences in this measure because, despite the Finns expressing more traditional and gender stereotypical views in Studies Two and Three, the actual proportion of female managers and leaders is very similar at a mid-managerial level in the two countries, and the proportion of female members on executive boards of the largest companies is actually higher in Finland than it is in the UK. Furthermore, based on Study One's findings, the Finns appear to view women's employment as more normative than the English, a finding that could mean that women's employment in managerial roles would also be deemed more normal by the Finns.

However, the results showed the Finns to be more stereotyped than the English in their implicit assumptions. The explicit stereotyping task, in which participants were asked who they would choose for the two positions, replicated the same nationality and sex effects as found in the implicit task. In short, girls were more likely than boys to select a woman as a manager, and the Finns were more likely than the English to choose 'traditionally' (i.e. a male for the managerial job, a female for the assistant's job). However, when examining the sex effects separately in the two countries it emerged that while in England ingroup bias seemed to be the driving force behind selecting the manager, in Finland more girls chose a man as manager than a woman.

This finding was further augmented by over 90 per cent of the Finnish boys choosing a male as a manager when among the English boys the percentage choosing a male manager was less than seventy. These results are in line with the findings in Study Two and Three which showed that the Finns view women not only more traditionally, but also somewhat more negatively than the English.

When participants were asked who they thought the company "Zelafeld" would hire as a manager and as an assistant, the responses were exceptionally univocal as three quarters of participants assumed the company to hire a male manager and eighty percent expected a female to be hired as an assistant. That there were no age, sex or nationality differences in these assumptions demonstrates the prominence of the continuing perception of males as leaders and managers, and women as subordinates. The assumptions of who the company will hire to the two positions were more consistent with boys' implicit and explicit attitudes than those of girls'. The discrepancy between girls' attitudes about who the company will hire and who they would hire themselves is telling as it shows that even at the age of thirteen, girls assume women to be at a disadvantage when recruitment decisions for managerial roles are made.

The implicit task used in the present study offered a simple way to measure the adolescents' assumptions about the type of job people of each sex will apply for. The same implicit task has been used by for example Heyman and Legare (2004), who examined the academic stereotype of boys being good at maths and girls good at literacy among children. Consistent with the present study, Heyman and Legare (2004) simply asked their participants to point to a child in a class photo that they thought was particularly good at maths or at literacy. Although this measure is much more straightforward than the IAT used in Study Three, it does also allow the examination of attitudes or implicitly held associations without revealing to participants that the study is interested in gender stereotypes.

The present findings supported Social Role Theory's (Eagly, 1987) assumption that occupational role will influence perceptions about personalities of unknown individuals. The results showed that occupational roles of the target individuals interacted with the target's sex in determining how they were viewed by the participants to an even greater extent than was predicted. The main evaluations of interest, the perceived instrumentality and expressiveness of target individuals, showed that the persons in gender incongruent roles were deemed the highest on these qualities as the female manager was evaluated as the most instrumental, and the male assistant as the most expressive. These findings are somewhat surprising as in line with SRT it could have been expected that the male manager would have been deemed the most instrumental and the female assistant as the most expressive because their sex and their role are congruent with each other.

The results seem to indicate that the vertical occupational stereotypes are still so prevalent that a person in a sex incongruent role is viewed as atypical of their sex. However, the perceived typicality of the target individuals for their sex did not seem to support this explanation as, although the targets in sex-incongruent roles were rated lowest on sex typicality, they were not significantly different from perceived typicality of targets in sex-congruent roles. One explanation for this finding could be that merely occupying a sex-incongruent role does not make a person sex atypical in the eyes of others, but instead indicates that the person must posses traits associated with the atypical role to a such an extent as to justify their occupational role.

Interestingly, female managers were deemed to be the most successful of the target individuals. They were also rated highest on both competency and earnings. These assumptions suggest that for adolescent participants a female who has ‘made it’ into a managerial role must indeed be very good at their job and hence also well rewarded financially. Similarly, the male assistant was perceived to be significantly higher on job competency than the female assistant. Furthermore, it was also assumed that the male assistant and the female manager liked their jobs more that the other two targets. This further indicates participants’ belief that in order to occupy a gender atypical role a person must be ‘truly suited’ for it, and happy in their position.

This finding is consistent with Expectancy Violation Theory, according to which violation of an expectation based upon group membership leads to the evaluation of that individual becoming more extreme in the direction of the violation (Jussim, Coleman & Lerch, 1987). Hence, a counter-stereotypical person who behaves more positively than expected is evaluated even more positively than the stereotypical person who behaves just as positively. Hence, it could be that in the present study, the female manager and male assistant were evaluated in such extreme manner because they were violating their gender-based expectations.

The age trends observed for the target ratings were rather surprising as rather than demonstrating an increased flexibility in attitudes with age, as was expected based on findings of Study Two and Three as well as the assumptions of cognitive theories, older participants were actually more conservative. This suggests that older participants were more influenced than the younger children by the societal stereotypes of what men and women in different occupational roles are like. However, the significant effect of age was limited to ratings of male characters only. This may be due to the male roles being viewed as less flexible than the female roles, since the latter have arguably been more influenced by societal changes of the recent decades (Diekman & Eagly, 2000).

The Finnish participants rated the female manager as more typical of their sex and also as less competent than the English participants. These national differences probably reflect the actual societal distinctions between

England and Finland, which cause Finns to perceive female manager as less abnormal than their English counterparts. Consequently they do not need to justify the female manager's position by exaggerating their competency at that job.

However, that the Finns rated the target individuals in sex congruent roles as higher on job liking than the English may well reflect Finns' more traditional views. While the English participants assumed the people in sex incongruent roles to be significantly happier at their jobs, the difference in the job liking ratings between the characters in incongruent versus congruent roles was much smaller among the Finns.

The mean scores and the main effects of sex and nationality on the Ambivalent Sexism Inventory mirrored those found in Study Three. Interestingly, the present study also found a significant main effect of age with the younger participants scoring higher than the older on benevolent sexism. This is especially interesting as the only other known study investigating the effect of age on the ASI found that younger adolescents scored lower than older on benevolent sexism (Masser, 1998). Masser (1998) explained this age effect by arguing that the benevolent attitudes formulate as a result of experience with the opposite sex, mainly via heterosexual relationships, and that younger adolescents do not endorse benevolent views because they have no experience of romantic relationship with the opposite sex.

As well as the current finding being in opposite direction to that of Masser (1998), the fact that a similar effect was not found in Study Three implies that the current finding should be further investigated. Within this thesis, this could be done by combining the data sets from Study Three and

Study Four in order to examine the effect of age in a larger sample, and also examine the effects of age separately for the two sexes and the two nationalities.

If the age effect was replicated among the combined sample, it could be attributed to younger participants not viewing the benevolent items as in any way negative towards women. In other words, the very inexperience with the opposite sex that Masser (1998) used as a reason for disagreement with the benevolent items could also be used as a rationale for younger participants agreeing with them more than the older. In short, for a 13-year old a statement such as “In an emergency, women should be rescued before men” may well appear righteous rather than offensive. If this was indeed the case, the lack of age effect on benevolent sexism in Study Three could be due to the younger age group being, on average, a year older (14) in Study Three than it was in Study Four.

The present research replicated the findings of Study Three as it was found that Finnish participants scored significantly higher than the English participants on hostile sexism. This finding is inconsistent with Glick and colleagues (2004) who argued that there is a negative relationship between agreement with hostile sexism and women’s empowerment within a given society. The results of the present study confirm the findings of Study Three, which implied this hypothesis to not fit the observed results in Finland.

A possible explanation for the confirmed nationality effect is related to the idea of ‘Gender consensus’ that has been argued to describe the social and political climate around gender issues in Finland (Seppälä, 1999). The term ‘Gender consensus’ contains the idea that issues of equality are no longer discussed in the open, because true equality has already been achieved. Therefore, feminism and equality work are often branded as fanaticism, which is considered both embarrassing and slightly ridiculous (Seppälä, 1999).

If this was indeed the case, it would explain the willingness of the Finns to agree with the hostile items of the ASI such as "Feminists are seeking for women to have more power than men." In order to further investigate this finding, future studies could examine ASI scores among a sample of Finnish adults in order to compare not only the scores of Finnish adults and adolescents, but also those of Finnish adults and adults from the UK and other cultures previously studied by Glick and colleagues (2000, 2004).

In this study a number of predictors of personal future success were identified. Self-perception of instrumentality was the strongest predictor of assumption of personal future success thus suggesting that these two variables are strongly associated in the minds of the participants. This association was also evident in the evaluations of the target individuals as the assumptions regarding target instrumentality and target successfulness were highly correlated. This association demonstrates that success is still deemed more compatible with instrumentality than expressiveness and due to the gender gap in self-perception of instrumentality boys emerged as more likely than girls to presume they will be successful in the future.

Importantly, higher scores on benevolent sexism was a significant predictor of assumption of future success for girls but not for boys. This association suggests that for girls holding more traditional attitudes about the relationship between the two sexes is actually linked to higher expectations and stronger belief in future success in terms of careers, earning and occupational competency. It could be that perceiving oneself as confident, ambitious and independent, as well endorsing benevolent beliefs such as women being positively differentiated from men and of men's obligation to protect and adore women may install young women with an expectation of success. In contrast it may be that girls high on instrumentality that reject benevolent views feel that their battle to succeed will be too difficult since in addition to breaking their gender norm by being instrumental, they are also breaking the norm of believing that men and women are dependent on each other for happiness and that women need protection and love from men in order to survive.

Furthermore, the significance of benevolent sexism in predicting girls' assumptions of future success is in line with the findings of the previous study. Study Three demonstrated that the endorsement of benevolent sexism was a much stronger predictor of role traditionalism for girls than it was for boys. Together the results of Study Three and Four suggest that benevolent sexism is indeed of crucial importance for girls, and more strongly related to their other attitudes than it is among boys. In Study Three it was suggested that benevolent sexism is central for girls because of the very negativity towards women that is embedded in the hostile sexism scale. Therefore, agreement with the hostile items may seem to girls like a 'betrayal of the ingroup'. In contrast, it could be that the positivity towards women integrated in benevolent sexism enables girls to express their agreement with some degree of role differentiation and traditionality that they may well view as desirable.

Conclusions

Study Four replicated the previous findings as the Finns and boys again emerged as more stereotypical and gender traditional than the English or girls. The construal of leadership was shown to be clearly more masculine in Finland where not only a majority of boys, but also a majority of girls, chose a man rather than a woman as a manager. That both sexes in both countries expected the company "Zelafeld's" to hire a man as a manager and a female as an assistant demonstrates 21st century adolescents to expect that gender is still a decisive factor when companies make recruitment decisions.

In their evaluations of target characters, the participants appeared to be strongly influenced by the interaction of sex and role. The female manager was deemed to be the most instrumental and successful, while the male assistant was evaluated as the most expressive. Such strong effects could be explained by the hypothesis of expectancy violation theory, but nevertheless these findings demonstrate the strength and robustness of association between males and leadership, and females and subordinate roles.

Basically, it appears that even the generation that has grown up in a supposedly gender-equal society assumes that only an exceptional female can rise to a position of power. That endorsement of benevolent sexism predicted assumption of future success for girls further indicates that the present day adolescent girls continue to perceive their prospects to be influenced, or even hindered, by their sex.

Chapter 8: Ambivalent attitudes toward men and women: Exploration of Finnish adults' attitudes

This chapter presents the fifth and final study of this thesis. Study Five further investigated ambivalent sexism in Finland by employing the Ambivalent Sexism Inventory (ASI, Glick & Fiske, 1996) and the Ambivalence towards Men Inventory (AMI, Glick & Fiske, 1999) among an adult sample. Studying ambivalent attitudes among adults in Finland was deemed necessary as the previous studies of this thesis have consistently shown that Finnish adolescents score higher than the English on hostile sexism and on other measures of gender traditionality. The ASI and the AMI have previously been explored in a cross-cultural context (Glick et al., 2004), but Finland has not been included in this research. In addition to exploring the attitudes of Finnish adults, secondary analysis was conducted on the adolescent ASI data collected for Studies Three and Four in order to compare these data to the cross-cultural adult data.

Ambivalent sexism: Gender differences found in this thesis

Within this thesis hostile sexism has been demonstrated to correlate positively with gender stereotyping of instrumentality and expressiveness (Studies Three and Four), with traditional gender role beliefs (Study Three) and with occupational gender stereotyping (Study Four). All of these studies have used adolescent samples. Studies Three and Four also showed that adolescent males score significantly higher than females on the hostile sexism subscale. This finding mirrors the gender gap found among adults in previous research (e.g. Glick et al., 1999, 2000, 2004).

In contrast, although females in Studies Three and Four did not score significantly higher than males on the benevolent sexism subscale, the scores on benevolent sexism were found to be more related to other variables among females than males. Specifically, in Study Three endorsing benevolent sexism was the strongest predictor of explicit role traditionalism for girls. This finding is consistent with previous research, which has shown that endorsing BS is more predictive of women's acceptance of gender-traditional beliefs than it is of men (Glick et al., 2004; Jost & Kay, 2005).

However, in contrast to previous cross-cultural research, Study Four demonstrated that benevolent sexism is a significant predictor of adolescents' beliefs about future success for girls but not for boys. A possible reason for this gender effect, discussed in Chapter 7 (p. 236), was that girls may feel that the best way to get ahead in a society where men hold more structural power is to some extent accept the status quo and to "play according the rules" of society. In other words it could be that girls who reject benevolent sexism perceive their chances of a future success to be slim as they are not willing to accept men's power over women.

This argument is supported by the findings in Study Two, which demonstrated that girls have equally ambitious future aspirations as boys (see Chapter 5), but nearly exclusively in the occupational sectors that are deemed either gender neutral (law, celebrity) or feminine (education, animal care). In addition, the fact that girls in Study Four expected a commercial company to hire a man for a managerial job, although they themselves would have hired a woman, demonstrates that girls perceive men to be at advantage when recruitment decisions for leadership roles are made.

Another explanation for the sex difference in the predictive power of benevolent sexism is that the hostile items reflect translucent resentment towards women. It is possible that even girls who support traditional gender roles would be disinclined to agree with hostile items such as “Most women are not grateful enough for all that men do for them”. Furthermore, agreement with hostile sexism may be perceived as disloyalty towards the ingroup (see Chapters 6 and 7). This is especially important with the samples used in the current research as loyalty for own sex is particularly important during childhood and adolescence. In contrast, agreement with the benevolent items is probably deemed more acceptable due to its inherent positivity towards women. It is feasible that adolescent girls do not yet comprehend the price women have to pay for agreeing with these seemingly flattering views (e.g. “Women have a better sense of right and wrong than men”).

Nationality differences on ASI: Why do Finns score so high?

Another key finding relating to ambivalent sexism and other measures of gender stereotyping within this thesis is the significant difference between the attitudes of Finnish and English adolescents. In all three empirical studies, compared to the English, the Finnish have expressed significantly more stereotypical attitudes and higher agreement with ambivalent sexism, especially the hostile subscale. The possible explanations for these differences have been speculated and discussed in Chapters 6 and 7, and can be summarised as follows:

Gender consensus

As discussed in Chapter 7 (p. 235) this term refers to the assumption that gender equality has already been achieved in Finland and hence it is neither necessary nor desirable to continue the debate over gender roles. As Seppälä (1999) argued, those who continue to assert that gender equality has not yet been achieved are readily labelled feminists (where the word 'feminist' has a negative connotation). In Finland, it is a common belief that feminists want women to have more power than men, and that they promote the much detested gender quotas and 'persecution' of men. Finnish society takes pride in its reputation as a gender equal nation where women participate in labour force and decision making to a greater extent than nearly anywhere else in the world. Therefore, arguments disputing this reputation are not well received and often dismissed as irrational or fanatical (Seppälä, 1999).

If the Finnish attitude towards the position of men and women can indeed be described as 'Gender consensus', the adolescents' endorsement of hostile sexism is not a surprising finding. For those sharing the view that true equality has already been achieved in Finland, the sentiments of HS scale must indeed seem accurate as they imply that women who are requesting more power than they already have are being unreasonable and ungrateful.

Backlash towards gender equality

As Finland is, in international comparison, advanced in terms of women's employment and opportunities, it has been argued that men are prone to feel resentment due to the lessening of their power relative to women (Nykänen, 2003). The improvement of the status of women and their achievements in traditional male fields has arguably led to fear, rejection and even aggressive reactions among some Finnish men (Nykänen, 2003).

Confrontations between men's and women's rights have appeared, especially along with the deteriorating economic situation during the 1990s, and since then there have been signs of backlash with respect to the position of women (Nykänen, 2003). It could be that men's negative reaction to women's increasing power has caused Finnish adolescent boys to become 'defensive' over their position, hence making them more prone to endorse hostile sexism than their English counterparts.

The backlash against gender equality might not be felt by men alone. Indeed, it may entail women feeling resentment towards the increasing ambiguity of the gender roles, and a reaction against the often heard idiom that women should 'have it all'[17]. The fact that a great proportion of Finnish women in the ISSP study expressed a desire to work part-time only (see Ch. 4) might indeed indicate that Finnish women would be happy to take a step back from the labour market and spend more time at home. This hypothesis is however inconsistent with the findings of Study Two that showed Finnish girls to be equally ambitious in career terms than were the Finnish boys.

Communality versus Individualism

In Hofstede's international comparison (2001, see Ch. 3), Finland is situated between the mostly communalist and mostly individualistic countries. However, when compared to England and other western democracies such as Scandinavian countries or the US, Finland scores notably high on communalism. The underlying communalism may well make Finnish people more traditional in their gender attitudes as it could be argued that a culture high on communalism is more likely to emphasise traditional role based expectations. In contrast, cultures high on individualism may be more likely to emphasise personal differences between people independent of their sex, and to base expectations of people on personal characteristics rather than on their group membership.

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[17] Women 'having it all' is used to imply that modern women want to be successful in their careers as well as having a family with children and well-kept house with a beautiful garden.

Based on the same rationale, it could be argued that cultures high on communalism may score higher than individualistic countries on both ASI and AMI. Benevolent attitudes towards both women and men could be seen to match the communal sentiments of harmony between groups, responsibility towards community and close relationships between individuals. Hostility towards men and women may be endorsed in the more communal cultures as means of maintaining the group cohesion where everybody should behave in accordance to the role determined by their sex.

Femininity of the Finnish culture

On Hofstede's dimension femininity versus masculinity Finland falls into the group of highly feminine cultures whereas Great Britain is highly masculine. All other Nordic countries as well as the Netherlands are also very feminine while countries such as the US, Germany and Japan are all highly masculine. In feminine cultures modesty and humility are deemed virtues whereas in masculine cultures it is acceptable to promote one's own success and abilities.

According to Hofstede (2001), masculine cultures value success, money, hard work, size and speed. It is desirable for men to be confident and strong while for women motherliness is considered an important asset. Children are brought up according to these ideals. In comparison, feminine cultures value pleasant way of life, nature and cooperation, and support abolition of gender roles.

In international comparison Finland is indeed a very family friendly culture in terms of childcare arrangements, equality of education and accessibility of healthcare. However, the results of this thesis have not supported the notion that the Finns, as members of extremely feminine culture, promote abolition of gender roles. Consistently, the results of the empirical studies so far conducted have instead suggested that the English, albeit being members of a highly masculine culture, are much more supportive of equality between the sexes. In addition, it seems that the strongly segregated labour market and the resulting wage gap are in a conflict with the idea that the Finns would be keen advocates of gender egalitarianism.

In contrast to Hofstede's hypotheses, it could be that the very fact that Finland is family friendly could actually enhance the traditionality of gender roles since the generous parental leave supplied by the state encourages women to take time off work to look after infants. Although the policies do not specify that mothers instead of fathers should take the paid leave, the disparity in wages between men and women makes it near impossible for fathers to stay at home for a long time. Consequently, women's advancement in their careers is often hindered by the long state-sponsored career breaks as although women are guaranteed the same job on their return, they have probably missed out on promotions and career developments during the long leaves.

As a consequence of women being more likely to stop working to look after children, they will also perform more of other household duties such as grocery shopping, cooking and cleaning. It is likely that such division of labour continues, to a great extent, even when mothers return to work.

Group dynamics between the two sexes

As discussed previously in this thesis (see Ch. 7, p. 204), dominant groups are normally perceived more positively than those in subordinate positions. A number of psychological theories (e.g. System Justification, Jost & Banaji, 1994; Social Dominance, Sidanius & Pratto, 1999; Social Identity Theory, Tajfel, 1981; status construction, Ridgeway, 2001) argue that positive attitudes towards dominant groups justify the status quo by implying that the dominant group inherently deserves their privileged position (Glick, Fiske et al., 2004). Typically, the higher status groups express stronger ingroup bias than the lower status group. Lower status groups tend to express either mild ingroup favouritism or slight outgroup favouritism. These effects have been found among groups based on, for example, ethnicity (e.g. Sidanius & Pratto, 1999), social class (Rudman, Feinberg, & Fairchild, 2002) and laboratory-manipulated status (Ridgeway, 2001).

The one exception to this rule appears to be the attitudes towards the two sexes as men, who hold more structural power, are perceived less favourably than women by both sexes. This bias has been found on both explicit and implicit measures of gender evaluation (see Nosek & Banaji, 2001; Rudman & Goodwin, 2004 for implicit measures, and Eagly & Mladinic, 1989, 1993; Fiske et al., 2002 for explicit measures). In general, men express slight or strong outgroup favouritism towards women while women tend to exhibit strong ingroup bias (Glick et al., 2004).

As discussed in Chapter 1 (p. 35), Glick and Fiske (1996) developed their theory of Ambivalent Sexism to explain this phenomena. The initial version of this theory considered ambivalent attitudes towards women, but in 2004 the authors extended it to include ambivalent attitudes held towards men. According to the Theory of Ambivalent Sexism, the difference in valence of attitudes towards men versus women is the basis for the continuing male dominance in society. This is because the positive stereotypes of women encompass a belief that women are more expressive, pleasant and sensitive than men and hence unsuitable for positions of authority.

In other words, the theory's key notion is that traditional hostile and benevolent beliefs about both sexes stem from a combination of men's greater power and interdependence between the sexes. More specifically, hostile attitudes towards women and men are created by men's dominance, while benevolence is a result of the interdependence of the sexes (Glick et al., 2004). To better articulate the ambivalence of attitudes towards the two sexes, Glick et al. (2004, p. 714) altered Eagly & Mladinic's (1993) dictum "women are wonderful" to "*Men are bad but bold and women are wonderful but weak*".

Ambivalent sexism and ambivalence towards men in a cross-cultural context

In previous studies (e.g. Glick et al., 2000; Glick et al., 2004), both ambivalent sexism and ambivalence towards men have been associated with a belief in traditional gender roles and gender stereotyping. The ASI was first tested by Glick and colleagues in a cross-cultural context in 2000, and was shown to be a reliable and valid measure of ambivalent sexism in all 19 nations included[18]. In 2004, Glick and colleagues conducted a second large-scale cross-cultural study in 16 nations, this time including both the ASI and AMI scales, as well as other measures of gender stereotyping[19]. The key results of these two studies are outlined below.

Factor structure of the ASI and AMI

Glick et al. (2000) conducted a factor analysis on the ASI data and found evidence of a complex model with two factors (hostile sexism and benevolent sexism), with three subfactors for benevolent sexism (paternalism, complementary gender differentiation and heterosexual intimacy). The findings of Glick et al. (2004) supported the complex AMI model, which included two factors: benevolence towards men (BM), and hostility towards men (HM), both with three subfactors (for BM: maternalism, complementary gender differentiation and heterosexual intimacy; for HM: resentment of paternalism, compensatory gender differentiation and heterosexual hostility).

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[18] The nations included in the 2000 study were Australia, Belgium, Botswana, Brazil, Chile, Colombia, Cuba, England, Germany, Italy, Japan, Nigeria, Portugal, South Africa, South Korea, Spain, The Netherlands, Turkey and the US

[19] The nations included in the 2004 study were Argentina, Australia, Colombia, Cuba, England, Germany, Italy, Mexico, Peru, Portugal, Singapore, Spain, Syria, Taiwan, The Netherlands and Turkey

However, analysis of the ASI in the 2004 study did not support the complex model of 2000. Instead, the factor analysis found support for the simpler model that included the two factors only with no subfactors identified for benevolent sexism. Glick et al. (2004) argued that although these conflicting results hinder the examination of the underlying forces behind Ambivalent Sexism, they do not affect the analysis or interpretation of the data as the three subfactors of benevolent sexism are only differentiated in factor analysis. In other words, even if benevolent sexism could be divided into three conceptually separate factors, these factors are not treated as disconnected entities in discussion about implications of benevolent sexism.

Correlation among scales

Glick and Fiske (1999) found positive correlations between all of the AMI and ASI scales among American samples, and in their cross-cultural study Glick et al. (2000) also found that within the ASI there were positive correlations between HS and BS. Furthermore, Glick et al. (2004) found that 87 of the 96 correlations among male participants were significantly positive, while all correlations were significant among female respondents. These findings support the notion that all of four scales measure traditional gender attitudes that are psychologically and socially consistent ideologies (Glick et al., 2004, p. 718). Interestingly, Glick et al. (2004) found that all correlations between the scales were moderately strong among both sexes, but on average stronger for women than for men. They argued this to be mostly due to women's scores on BS being more strongly related to HS, BM and HM than are men's. Glick et al.'s (2004) argued that for women, BS is particularly predictive of overall acceptance of other gender-traditional beliefs.

The relationship between AMI, ASI and gender equality

Glick and colleagues (2000, 2004) have argued that as both ASI and AMI reflect gender inequality, the national averages should be negatively correlated with national indices of gender equality. To test this hypothesis, the relationship between countries' scores on GDI and GEM[20] and the national averages of HS, BS, HM and BM were examined. In both of their cross-cultural studies the authors demonstrated the expected (mostly significant) negative correlations between these measures.

These findings support the idea that gender inequality in society is maintained by ASI and AMI which either enhance the perceived legitimacy of gender inequality or its perceived stability (Glick et al., 2004). Glick et al. (2004) argue that ambivalent sexism enhances traditional gender beliefs while ambivalence towards men works as a hierarchy-stabilizer. Glick and colleagues suggested that even HM, which is seemingly rather negative towards men, reinforces the notion of inevitability of male dominance despite men being portrayed rather negatively in the scale. Glick and colleagues argue that HM reflects the endorsement of the macho ideal whereby men trade being likeable in order to achieve status and power.

In contrast, women who endorse HM, especially in gender-traditional societies, may be expressing frustration over male dominance (Glick et al., 2004). Although there probably is a limit to how much men are willing to agree with HM due to its negativity towards them, it is noteworthy that men's scores on the scale are highly correlated with the gender-traditionality of their culture. Furthermore, even though women in gender-traditional cultures scored highly on HM, they also scored highly on BM thus indicating that the endorsement of HM is not as much a challenge to gender hierarchy than it is an expression of resentment towards a system that is however accepted as a norm.

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[20] GDI = Gender Development Index, GEM = Gender Empowerment Measure

Gender gaps on the ASI and AMI

In Glick et al.'s (2004) cross-cultural study, women scored significantly higher than men on HM in all countries apart from England[21]. On the contrary, men scored higher than women on BM although this difference was not significant in five out of the 16 countries. In both cross-cultural studies (2000 & 2004) men scored significantly higher than women on HS in all nations included, while the sex differences were more varied on BS. In Glick et al. (2004) men scored higher than women on BS in five countries (Netherlands, Mexico, Portugal, Spain and Taiwan), while the sex difference was non-significant in nine countries. Women outscored men in two nations, Cuba and Syria, which were also the two countries with the highest scores on BS among men.

Glick et al. (2004) argued that the cross-cultural variation in gender gaps on HS and on BS scores was linked to the overall degree of endorsement of traditional gender attitudes. Their findings demonstrated that the gender gap increased for HS and decreased for BS the more each nation endorsed generally sexist attitudes (as measured by the overall score on ASI and AMI combined). The data showed that in countries where men strongly endorse HS, women endorse HM more strongly relative to men. According to Glick et al. (2000, 2004), this is because the more hostility there is among men towards women, the more women feel resentful toward men (and hence endorse the sentiments of HM).

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[21] In England, men scored higher but the gender effect was not significant

Furthermore, Glick et al. (2004) found that across the nations included in their sample the gender gap on HM increased in tandem with women's average scores on the scale. This effect mirrors the effect Glick et al. (2000) found for hostile sexism: the gender gap in HS correlated positively with men's average HS scores. Together these findings show that the more one sex endorses hostility towards the other, the larger the difference is between men and women in their hostile attitudes.

Another significant trend in correlations was related to the gender gap on BS. In both the 2000 and 2004 studies Glick and colleagues showed that the more men endorse either HS or BS, the more women evinced BS relative to men. Glick et al. (2004) explain this trend by arguing that in societies where men hold sexist attitudes, women endorse BS as means of both protecting themselves and positively differentiating themselves from men. After all, if society is structured based on traditional gender roles and male dominance, fewer opportunities (in terms of economic independence, education and careers) are available for women, thus making them more dependent on men. For these women, endorsing the sentiments of benevolent sexism (i.e., men should put women in pedestal, men should provide for women, men should cherish and protect women) provide a safeguard against hostility and feelings of inferiority.

Glick et al. (2004) raised the question as to why men consistently score higher than women on BM while women rarely endorse BS more than men. Their explanation for this discrepancy was based on the fact that while BS is to some extent flattering towards women, endorsing its sentiments comes at a cost to women that men do not incur by accepting BM. Essentially, while BS implies that women are in some ways better than men, it also implies that women are best suited to lower status roles. Therefore endorsing this view is detrimental for women. Meanwhile, BM supports the notion that men are better suited for higher status positions, and should hence be excused from domestic duties that they cannot even be expected to be able to do. For men, endorsing this view does not incur the same costs as women experience when adopting the BS view. Glick et al. (2004, p.726) compare the support for men's power over women as expressed by BM to the concept of "White men's burden" that justified the suppression and maltreatment of black and Asian people during the years of colonization and slavery.

Despite the significance of the gender difference found by Glick and colleagues (1999, 2000, 2004) it is important to note that all studies demonstrated a rather striking consensus in men and women's attitudes. Glick et al. (2004, p.726) noted that the differences between the sexes was superseded by the agreement between them. For both sexes the scores on the AMI and ASI were positively correlated with each other, and both were negatively correlated with indices of gender equality. Glick et al. (2004) emphasised that in cross-cultural comparisons men's scores on the AMI and ASI correlated in the .70 to .90 range with women's scores. These correlations indicate a strong social consensus on gender ideologies, which will ultimately act as a powerful stabilizer of the existing status quo.

Present Study

The key objective of the present study was to examine the extent to which Finnish adults endorse ambivalent attitudes towards men and women. Finland has not been included in previous cross-cultural research employing ASI or AMI, and these inventories have never been used in Finland. The examination of ambivalent attitudes towards men and women is not only important because studies in this thesis have shown that Finnish adolescents show comparatively high levels of hostile sexism, but also because Finland is a country typically viewed as a haven of gender equality. In general, it is surprising that previous cross-cultural work on ambivalent sexism has not included any Nordic or Scandinavian countries that have much more strongly developed policy promoting social welfare and gender equality (see Ch. 3).

In light of the findings in Studies One to Four, it seems that Finland is inconsistent with the trends found in other cross-cultural studies (Glick et al., 2000, 2004). Previous cross-cultural research has shown that gender equality (as measured by GEM & GIM) is negatively correlated with endorsement of ambivalently sexist attitudes (Glick et al., 2000, 2004). Meanwhile the research reported in the thesis suggests that despite being the head of the table on these measures of gender equality, the Finnish adolescents consistently display gender-traditional and stereotypical attitudes. However, as studies in this thesis have so far focussed on adolescents, and as endorsement of ambivalent sexism by non-adults has rarely been studied, the possibility that the views of Finnish adolescents differ from those of Finnish adults is explored.

The second aim of Study Five was to conduct secondary analyses on the adolescent ASI data collected for Studies Three and Four of this thesis. Combining the two data sets was hoped to result in a more representative sample on which more reliable analyses could be performed in terms of age, sex and nationality effects. The means of this combined data set could also be compared with the adult means from both this study and from Glick et al.'s (2000, 2004) cross-cultural studies. As there has been no previous published research comparing the ASI and AMI scores of non-adults and adults within one country, this study will be a valuable addition to Ambivalent Sexism research as it will allow the comparison of English and Finnish adolescents' views with their adult counterparts.

Predictions

Based on the findings of previous empirical studies of this thesis, the Finnish adults were expected to score higher on all Ambivalent Sexism scales (HS, BS, HM, BM) than English adults have done in Glick and colleagues' cross-cultural work. This prediction is in direct contrast with previous cross-cultural research that has found a negative relationship between endorsement of the ASI and AMI, and gender equality as measured by GDI and GEM.

Based on Glick and colleagues previous findings (2004), all subscales of the ASI and AMI were predicted to be correlated among the Finnish sample. Furthermore, it was predicted that these correlations will be stronger among females than male participants. In line with gender effects found in previous research, Finnish women were expected to score higher than men on the Hostility towards Men scale, while men were expected to score higher on both Hostile Sexism and Benevolence towards Men. As Finnish men were expected to score relatively highly on Hostile Sexism, it was expected that there would be no significant sex difference on Benevolent Sexism, or that Finnish women may even score slightly higher than the men on this (as is generally the case in those countries where men strongly endorse HS). Also, as Finnish men were expected to have high scores on Hostile Sexism, Finnish women's scores on Hostility towards Men were also expected to be high in international comparison.

The secondary analysis of the data sets from Studies Three and Four was expected to confirm that the Finns endorse Hostile Sexism much more strongly than the English, and that the national difference would be especially prominent among boys. The analysis was also expected to confirm that boys endorse Hostile Sexism significantly more than girls, and that the gender difference in Benevolent Sexism is non-significant in both countries.

The analysis on the age effects was predicted to support the findings of Study Four that demonstrated younger participants to score higher than older participants on Benevolent Sexism. This prediction goes against the findings of Masser (1998) that showed older adolescents to endorse BS more strongly than younger. However, as argued in Study 4, conceptually it makes more sense to argue that inexperience with the opposite sex makes *the items* of the BS scale seem more rather than less acceptable. As argued above, it is expected that adolescent girls especially do not yet comprehend the negative consequences of endorsing benevolent sexism but are instead inclined to agree with the sentiments that are seemingly very positive towards women.

Method

Participants and procedure

The adult participants of the study were recruited from Laurea University of Applied Sciences. The institution, which is located in Helsinki area, currently has approximately 8000 students in eight faculties. Most programmes of study relate to welfare, business, and information and communications technologies. For the purpose of the present study, all students in the Faculty of Social Services, Health and Sports were sent an email by the head of Faculty introducing the study, and asking them to fill in an online questionnaire. Overall, the request to participate was sent to 523 students, of whom 208 completed the questionnaire (response rate 39.7%). Four responses were deleted as they were incomplete.

Of the 204 respondents, 66 were male and 138 female. Although these figures mean that the cell sizes are significantly different from each other, they do not differ significantly from the cell sizes of previous Ambivalent Sexism studies. Table 1 displays the sample sizes and male-female ratios for this study and for the other countries included in the cross-cultural study of Glick et al. (2004). In comparison to the national samples in Glick et al.'s study, the current sample is rather small but is, however, larger than those from England or Argentina. Like most of the samples in Glick et al.'s research (2000, 2004), the current sample cannot be considered representative of its nation. However, collecting data from a more vocationally orientated institution was speculated to make the data set more representative than if it were collected from more academically orientated university.

Table 1.

Sample sizes and male to female ratios in Glick et al.'s 2004 study and the present study

Country	**N (Total)**	**N (Male)**	**N (Female)**	**Male-Female Ratio (%)**[22]
Argentina	196	35	161	18 – 82
Australia	419	106	313	25 – 75
Colombia	233	60	173	26 – 74
Cuba	300	138	162	46 – 54
The Netherlands	1135	835	300	74 – 26
England	164	44	120	27 – 73
Germany	481	205	277	43 – 57
Italy	332	105	227	32 – 68
Mexico	430	135	295	31 – 69
Peru	395	201	194	51 – 49
Portugal	286	59	227	21 – 79
Singapore	408	163	245	40 – 60
Spain	1003	495	508	49 – 51
Syria	538	268	270	50 – 50
Taiwan	1021	509	512	50 – 50
Turkey	654	320	334	49 – 51
FINLAND	**204**	**66**	**138**	**32 – 68**

The participants were asked to report their sex, and whether their age fell in the bracket of 20-30, 30-40 or 40-50 years. Most participants fell into the bracket of 20-30 (71%), while 24% of participants were aged between 30 and 40, and five per cent 40 to 50 years old. The current sample was slightly older than those included in Glick et al.'s studies that have typically used student samples where most participants are aged between 18 and 25. Indeed, the fact that the current sample was slightly older than is usually found in Ambivalent Sexism research means that it may well be slightly more representative of the general population than previous studies.

The email from the head of faculty included a link to the online questionnaire. Participants' responses were automatically saved into a database secured by a password that only the researcher knew.

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[22] The percentages have been rounded to include no decimal points

Online questionnaire

The online questionnaire included the full Ambivalent Sexism (Glick & Fiske, 1996) and Ambivalence towards Men Inventories (Glick & Fiske, 1999). The ASI scale includes 22 items, with 11 items measuring each subscale. Out of the 11 benevolent sexism items, four measure heterosexual intimacy, four protective paternalism and three complementary gender differentiation.

The AMI scale comprises of 20 items, with ten items measuring each subscale. Of ten items tapping into benevolence towards men, three measure maternalism, three complementary gender differentiation and four heterosexual intimacy.

All items were translated into Finnish by the researcher. The initial translations were back-translated by an independent person proficient in both languages. The AMI items are shown in full in Appendix 4.

In line with the cross-cultural studies of Glick and colleagues (2000, 2004), all items were responded to on a Likert-type scale anchored by 0 (Strongly disagree) and 5 (Strongly agree)[23]. Hence, the scale had no mid-point consequently forcing participants to either agree or disagree with items to some extent.

Secondary Analysis

The responses to the ASI items from Studies Three and Four were combined in a new data set. Whether the data was collected in Study Three or Four was included as a variable in the new data set. All the responses on the ASI items collected in Studies Three and Four were converted using Aiken's (1987) formula to allow comparison with the adult data collected in Glick et al's (2000, 2004) studies that used a 0 to 5 response format [-.5 + 6(score - .5) / 7]. The combined data set included 606 cases (304 from Study Three and 302 from Study Four).

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[23] A 1 to 7 rating scale was used in England for both cross-cultural studies of Glick et al. To reliably compare the English data with that of other nations, Glick et al. used a formula derived from Aiken (1987) to approximate a 0 to 5 scale.

The age range of the participants in the combined data set was 12 to 13, and 15 to 16. The 12 to 13 year olds formed the younger age group (N = 319). The mean age of this group was 153.06 months (12.76 years). The older age group comprised of 15 to 16 year olds (N = 287), with the mean age of 188.29 months (15.69 years). These age groups will be referred to as the 13- and the 16-year olds in the remaining of the chapter. The sex distribution among the sample was even (300 boys, 306 girls), as was the distribution of the two nationalities (296 English, 310 Finnish).

Results

ASI and AMI Attitudes of Finnish Adults

The reliability of the four scales was inspected first. These were found to be good with Cronbach's alpha of .87 for hostile sexism, .82 for benevolent sexism, .79 for hostility towards men and .81 for benevolence towards men. All four reliability coefficients were larger among the Finnish sample than the average reliability coefficients reported by Glick et al. (2004).

Next, correlations between the AMI and ASI scales were analysed. The correlation coefficients, separately for men and women, are displayed in Table 2. The same table also shows the average correlation between the scales for the 16 countries included in Glick et al.'s cross-cultural study (2004). In comparison to the averages from the Glick et al.'s study (2004), the

Finnish inter-scale correlations were particularly strong among males for HM – BM, HM – BS and BM – BS. Finnish females' inter-scale correlations were also notably high between BM and BS. Overall, the correlation between HS and BS was notably lower among Finnish participants than the average from Glick et al.'s 16-nation study. The correlation coefficients were larger among female than male respondents only for BM – BS, HS – HM and HS – BS, while men displayed clearly higher correlation than women on HM - BM.

Table 2.
Inter-scale correlations

Sex	HM - BM	HS - BS	HM - BS	HS – HM	BM -BS	HS – BM
Males	.59**	.21	.55**	.27*	.70**	.49**
Females	.49**	.36**	.54**	.34**	.77**	.48**
Mean correlation from Glick et al. (2004)	.46(male) .46(female)	.33(male) .44(female)	.39 (male) .54(female)	.34 (male) .36(female)	.56 (male) .69(female)	.50 (male) .49(female)

In the present study, men scored significantly higher than women on Benevolent Sexism, $t(202) = 3.16$, $p <.005$, on Benevolence towards Men, $t(202) = 2.97$, $p <.005$, and on Hostile Sexism, $t(202) = 2.49$, $p <.05$. In contrast, women scored significantly higher on Hostility towards Men, $t(202) = -3.53$, $p <.001$. The means and standard deviations, as well as male and female means from Glick et al. (2004), are shown in Table 3.

Table 3.

Means and Standard Deviations for ASI and AMI subscales

	HS	BS	HM	BM
Male respondents	2.86 (.79)	2.28 (.86)	1.70 (.79)	2.14 (.77)
Female respondents	2.54 (.88)	1.88 (.83)	2.11 (.77)	1.78 (.84)
Means from Glick et al. (2004)	2.78 (males) 2.24 (females)	2.66 (males) 2.57 (females)	2.33 (males) 2.83 (females)	2.45 (males) 2.11 (females)

To allow for comparison between Finland and other nations, bars representing Finnish means were inserted into illustrations of comparisons across nations produced by Glick et al. (2004). These illustrations are shown in Figures 1 to 4[24].

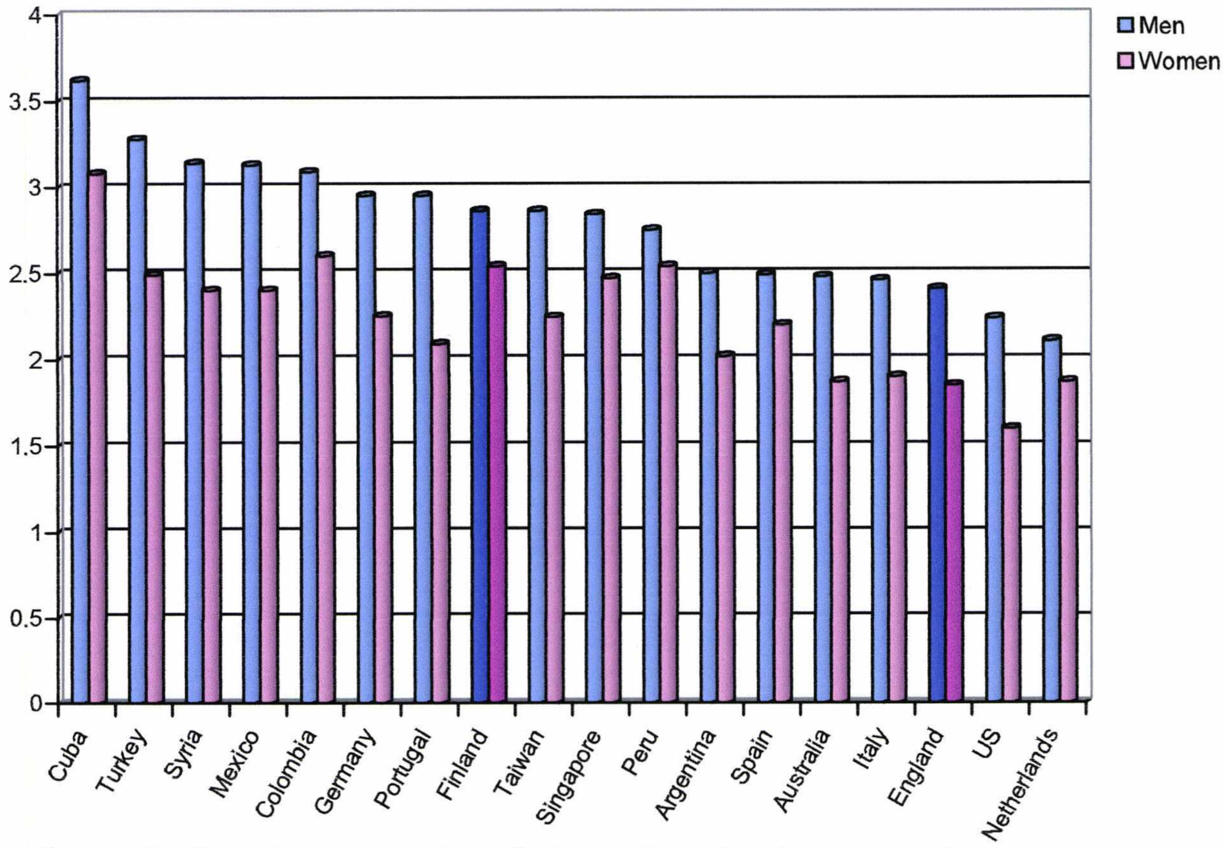

Figure 1. Hostile sexism across cultures (in descending order of men's scores)

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[24] The US scores are not derived from the cross-cultural study of 2004, but from typical means found in Glick and Fiske (1999) for the AMI and from Glick and Fiske (1996) for the ASI.

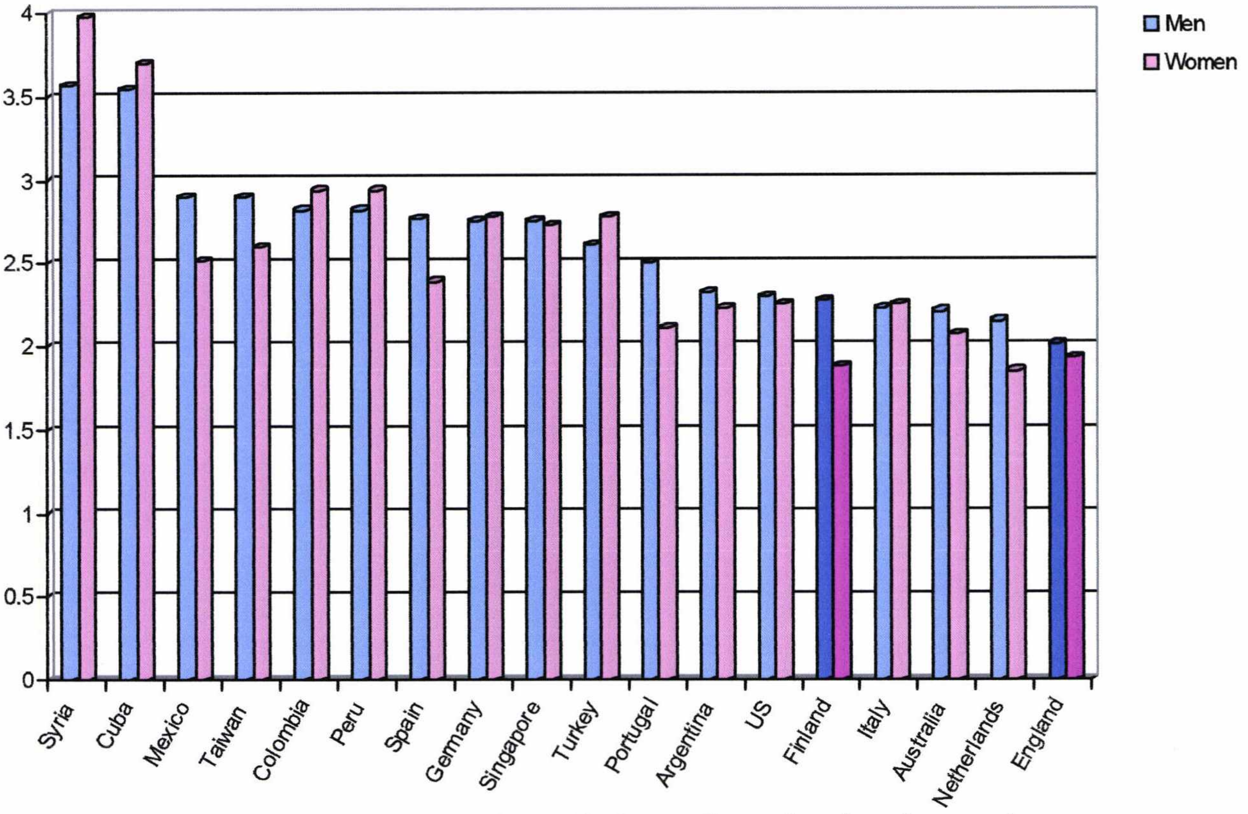

Figure 2. Benevolent sexism across cultures (in descending order of men's scores)

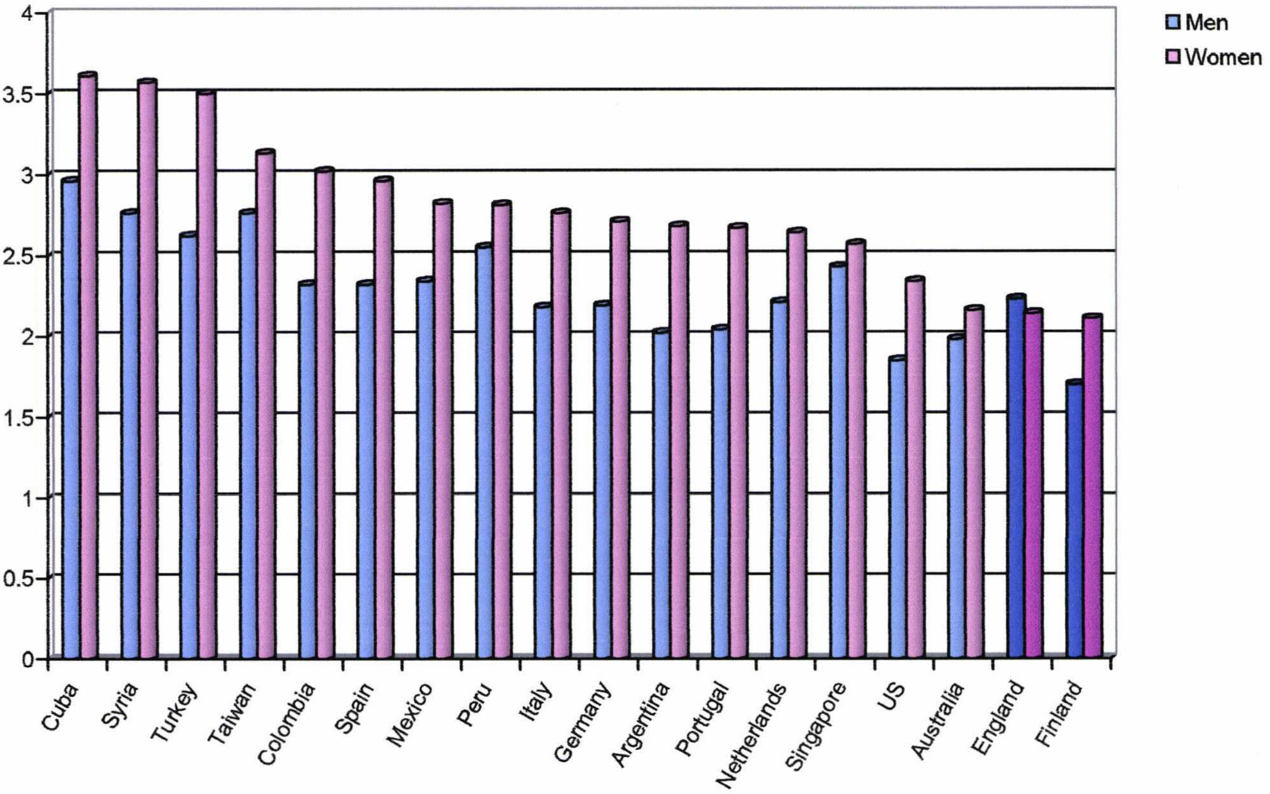

Figure 3. Hostility towards men across cultures (in descending order of women's scores)

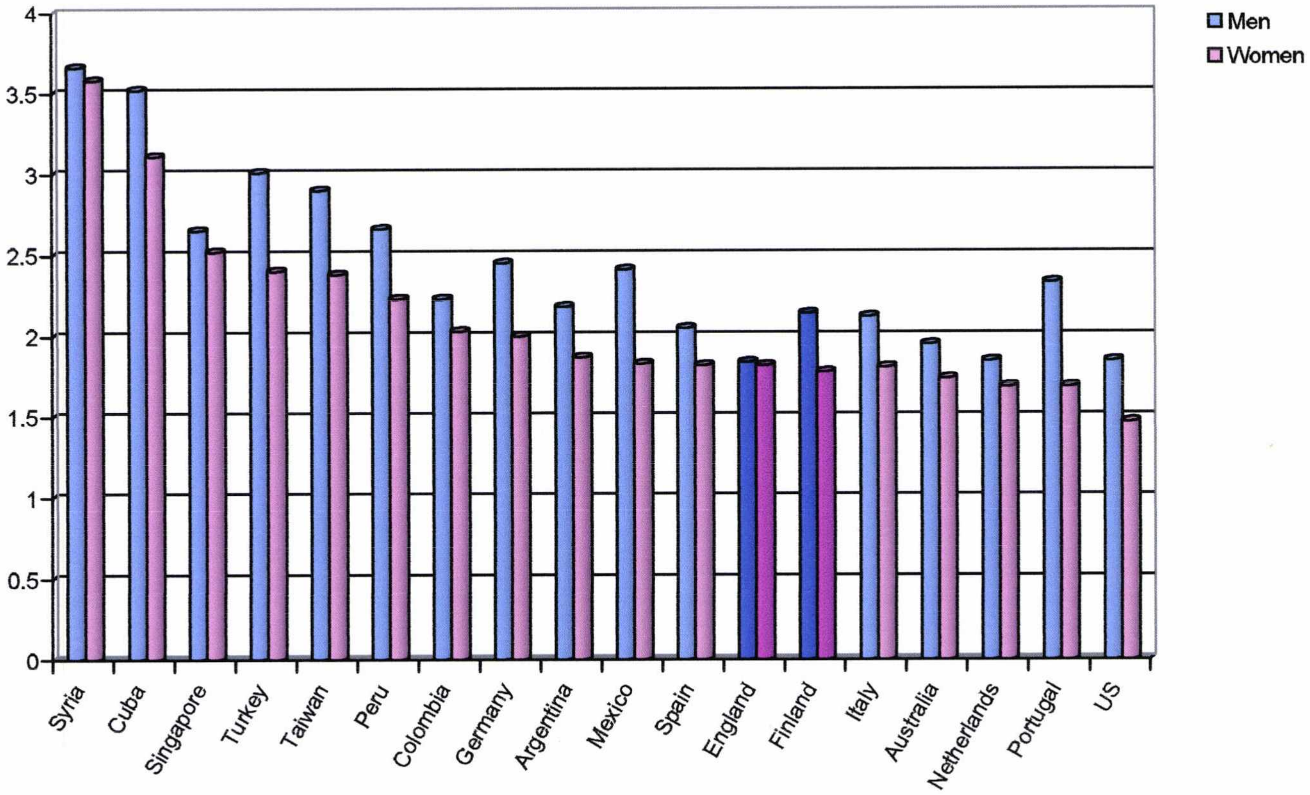

Figure *4.* Benevolence towards men across cultures (in descending order of women's scores)

Because the two subscales of ambivalent sexism relate to such different types of gender-attitudes, and as the Finnish sample seemed to differ to a much greater extent than other nations previously studied in their endorsement of the two (apart from Turkish men), difference scores between males and females' means on HS and BS were calculated. Figures 5 and 6 illustrate the relationships between these two subscales in different countries. The countries selected for comparison are mostly other Western democracies and European countries included in Glick et al.'s 2004 study. In addition, Taiwan was included as Taiwanese men scored exactly same than Finnish men on hostile sexism.

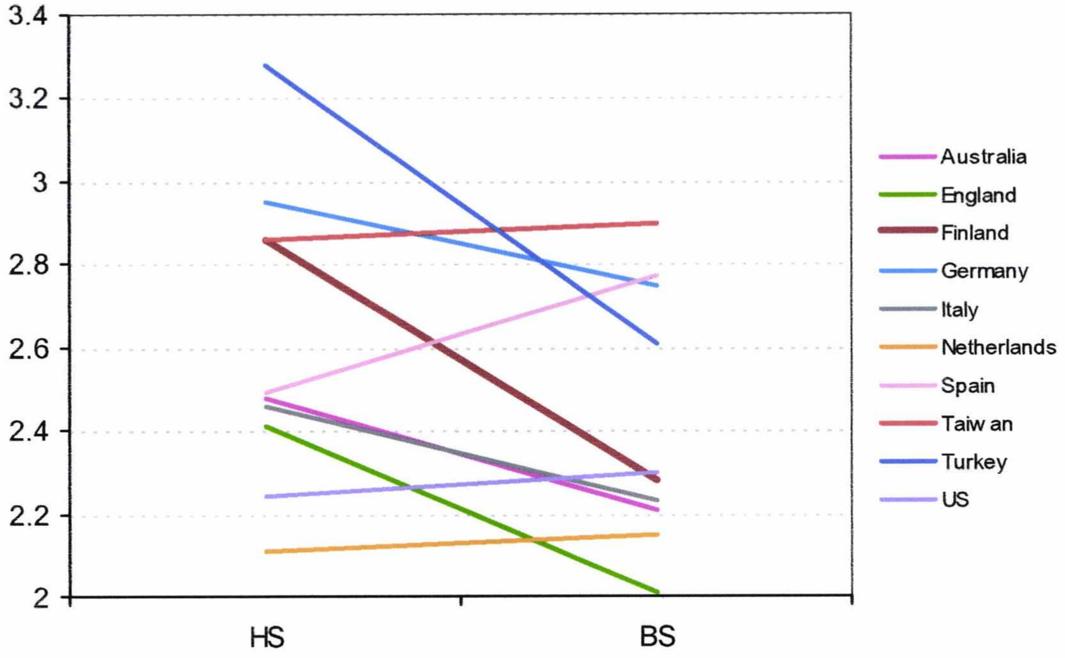

Figure 5. Endorsement of HS and BS among men in selected countries

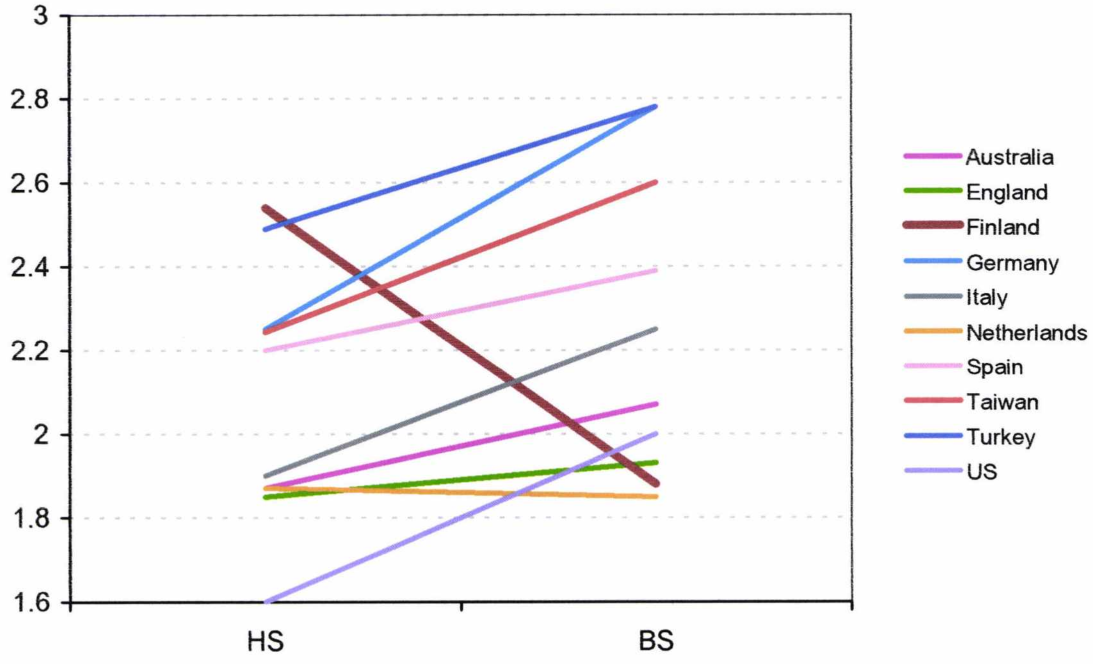

Figure 6. Endorsement of HS and BS among women in selected countries

Secondary analyses of the adolescence data

A 2 (nationality: Finnish and English) x 2 (sex: male and female) x 2 (age: 12 and 15) x 2 (number of study: Study Three and Study Four) between-subjects multivariate analyses of variance was performed on dependent variables Hostile sexism and Benevolent sexism. First, the combined data set was screened for variables with missing values on the ASI scales. Five cases with missing values were deleted resulting in the consequent analyses being carried out on 601 cases. There were no univariate or multivariate outliers at $p<.001$. Results of evaluation of assumptions of normality, homogeneity of variance, linearity and multicollinearity were satisfactory.

With the use of Wilks' criterion, the combined DVs were significantly affected by nationality, $F(2, 599) = 8.59$, $p <.0001$, $\eta^2 = .03$; sex, $F(2, 599) = 73.36$, $p <.0001$, $\eta^2 = .20$; and age $F(2, 599) = 9.01$, $p <.0001$ $\eta^2 = .03$. The effect of Study number was not significant, $F(2, 599) = 3.89$, $p <$ ns. The combined DVs were not affected by interactions of the IVs.

The impact of each individual IV on the DVs was examined next. Nationality had a significant effect on Hostile sexism, $F(1, 590) = 16.80$, $p <.0001$, $\eta^2 = .03$, with the Finns scoring significantly higher than the English. Nationality had no significant effect on benevolent sexism. Sex significantly affected both hostile sexism, $F(1, 590) = 138.99$, $p <.0001$, $\eta^2 = .19$, and benevolent sexism, $F(1, 590) = 11.30$, $p <.0001$, $\eta^2 = .02$, with boys scoring higher than girls on both subscales. Age significantly affected benevolent sexism, $F(1, 590) = 14.74$, $p <.0001$, $\eta^2 = .02$, as the younger participants scored significantly higher than the older. The means and standard deviations are shown in Table 4.

Separate t-tests were conducted to examine whether there were significant differences between the two age-groups among boys and girls in the two countries. No significant differences emerged for boys in either country, but in Finland older girls scored significantly lower than the younger on benevolent sexism, *t*(155) = 2.67, *p* <.01. Among the English girls also, the older scored significantly lower than the younger on benevolent sexism, *t*(146) = 2.69, *p* <.01, but significantly higher than the younger on hostile sexism, *t*(146) = -2.69, *p* <.01.

Table 4.

Means and standard deviations on the ASI scales

	Finland				England			
	Boys		Girls		Boys		Girls	
	12	15	12	15	12	15	12	15
Hostile sexism	3.31 (.75)	3.1 (.78)	2.48 (.92)	2.56 (.68)	2.94 (.87)	3.11 (.78)	1.98 (.83)	2.34 (.83)
Benevolent sexism	2.88 (.77)	2.74 (.67)	2.74 (.67)	2.44 (.72)	2.98 (1.23)	2.69 (.73)	2.77 (.61)	2.48 (.69)

Next, correlations between the subscales were examined. The correlation analyses were performed separately within each nationality for different sexes and age groups. The correlation coefficients are shown in Table 5. The coefficients of inter-scale correlations clearly differ from the adult correlations displayed in Table 2.

Table 5.

Inter-scale correlations among adolescents

	English Boys		English Girls		Finnish Boys		Finnish Girls	
	12	15	12	15	12	15	12	15
HS - BS	-.09	.03	.08	.22	-.23*	.32**	.08	.25*

* *p* <.05, ** *p* <.01.

Comparisons of adult and adolescent data

In the final stage of the analysis, the ASI means of the English and Finnish adults were compared with the means of their adolescent compatriots. The means for English adults were obtained from the Glick et al. (2004) study, which means that the current analysis was not completely independent. Figures 7 and 8 illustrate the development of Hostile and Benevolent sexism in the national samples. The figures indicate that the two components of Ambivalent Sexism develop differently from each other, and that while Benevolent sexism follows similar developmental pattern for both sexes in the two countries included, the development of Hostile sexism is markedly different in the two countries included in analyses.

Finally, the correlation coefficients for the relationship between the two subscales of Ambivalent Sexism were compared. These comparisons are illustrated in Figure 9. The illustration indicates that while the development of the relationship between the two components of ASI is similar for English males and females and for Finnish females, the trend is very different among Finnish males.

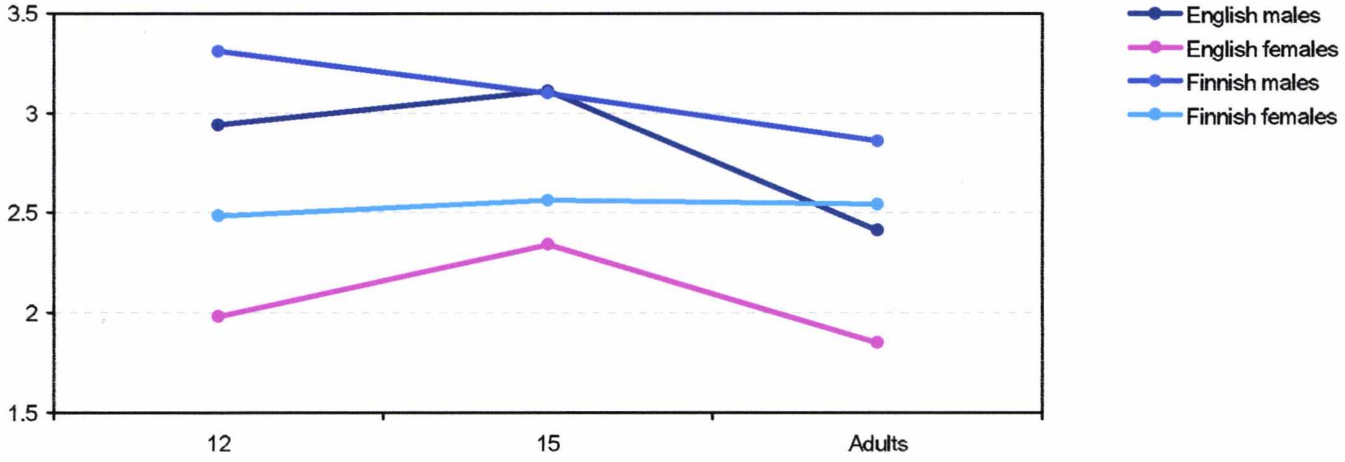

Figure 7. Development of Hostile sexism in England and Finland

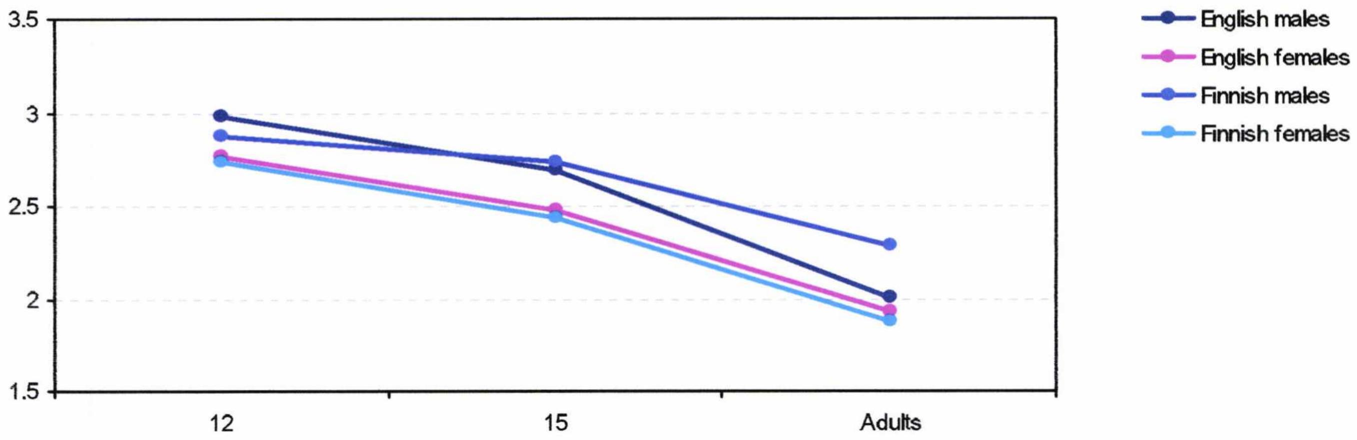

Figure 8. Development of Benevolent sexism in England and Finland

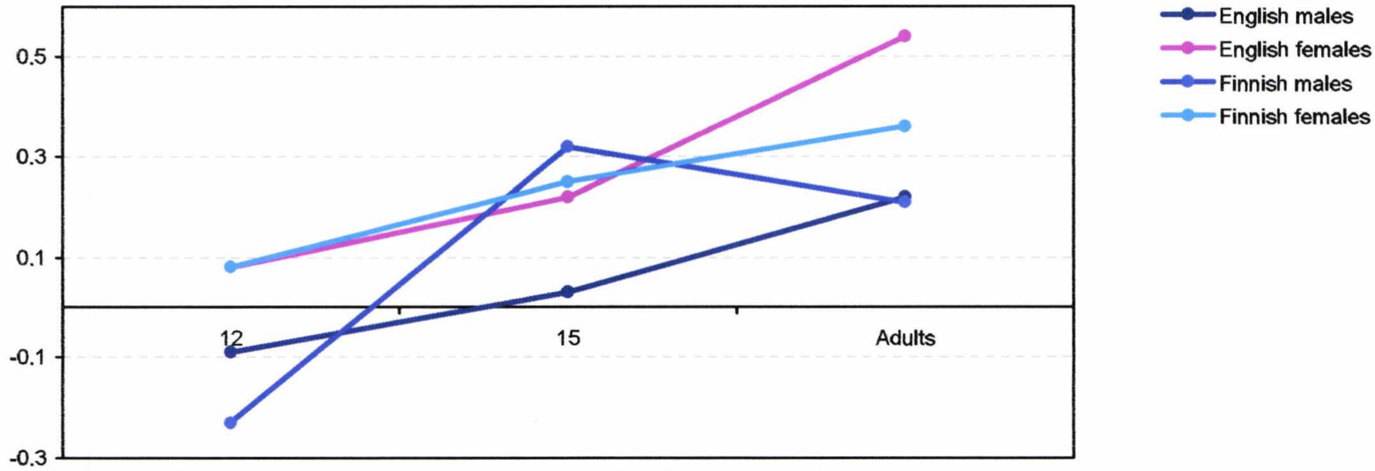

Figure 9. Correlation coefficients for the relationship between HS and BS

Discussion

The aim of the fifth and final empirical study of this thesis was to further investigate ambivalent sexism, which has been shown to be strongly linked to other measures of gender stereotyping in studies Three and Four, as well as in previous research by Glick and colleagues (1996, 2000, 2004). The previous studies of this thesis have also shown that Finnish adolescents' attitudes on this scale are unexpectedly high given previous findings in cross-cultural research using the ASI (Glick et al., 2000, 2004), and also the organisation of labour market in Finland and the country's reputation as a forerunner of gender equality. In order to provide some further explanations for the findings among adolescents, the present study explored Finnish *adults*' attitudes towards ambivalent sexism, and compared these to the cross-cultural findings of Glick and colleagues (2000, 2004) and to adolescent attitudes examined in Studies Three and Four of this thesis.

For the Finnish adult sample, three findings emerged as particularly notable. Firstly, both sexes scored remarkably high on hostile sexism. Finnish men's score was the eighth highest in international comparison, and the only other European countries where men scored higher on hostile sexism were Portugal and Germany. The mean score of Finnish men was clearly higher than the midpoint of the scale, thus indicating that on average they agreed with the hostile sexism items. More notable, however, is the high mean score of Finnish women on hostile sexism. In international comparison, only women from Cuba and Colombia scored higher than did the Finnish women. The gender gap in hostile sexism was the fourth smallest in international comparison, and particularly small when compared to other nations where men scored similarly highly on this scale.

Finnish adults' strong endorsement of hostile sexism has important implications for the theory of Ambivalent Sexism and for gender research in Finland. Glick and colleagues (2000, 2004) have generally argued that endorsement of hostile sexism in a given culture is a sign of overall gender traditionality that is negatively correlated with gender equality indices such as GEM and GDI. Support for this argument is provided by studies that have found that the endorsement of hostile sexism is predictive of negative attitudes towards and stereotyping of women (Glick & Fiske, 1996).

Agreement with hostile sexism indicates a belief that women exaggerate the existence of sexism; that women use sexual relationships to manipulate and control men; that women seek to gain more power than men have; and that women take advantage of men if only given a chance. Thus, the present findings suggest that such beliefs are held not only by Finnish men but also by Finnish women. This uniformity of attitudes supports the notion of Gender Consensus (see p. 246), which reflects the idea that because gender equality has already been *completely* achieved in Finland, women desiring any more rights or power is unreasonable and reflects fanatic feminism.

However, the idea that the high levels of hostile sexism exhibited by Finnish people is due to Gender Consensus is problematic given that in actual fact, full gender equality has not yet been achieved in Finland. Although Finland is high on the international tables of GEM and GDI, it is also characterised by a largely segregated labour market, wide gender wage gap, high levels of violence towards women and a rather traditional division of housework and childcare. Furthermore, although Finnish childcare policies enable women's return to work after childbearing, they also promote women, rather than men, staying at home to look after children. However, it is possible that despite these indicators of gender inequality in Finland, Finnish people generally perceive their culture as very equal and hence choose to ignore indicators of unfairness.

This first key finding is made yet more notable by the second key finding of the present research. The high level of hostile sexism identified among the Finns is further highlighted by the Finns', and especially Finnish women's, low scores on benevolent sexism. The Finnish females' score is the second lowest in international comparison, with only Dutch women scoring lower than the Finns. This finding contrasts Glick et al.'s (2000, 2004) hypothesis of women scoring high on benevolent sexism in countries where men score high on hostile sexism. The rationale behind this hypothesis is that the more gender traditional the nation, the more women endorse benevolent sexism relative to men, as benevolent sexism offers women both protection and a positive identity.

Finnish women's low scores on benevolent sexism indicate that they perceive benevolent sexism items offensive towards women. As argued by Glick et al., they appear to acknowledge the price that endorsement of BS occurs to women and hence reject its sentiments. The finding that Finnish men endorse benevolent sexism significantly more than women implies that they agree more than women with the idea that women are weak while men are strong, that women are dependent on men, and that the two sexes are inherently different. Indeed the gender gap in benevolent sexism was larger among the Finnish sample than among any other national sample investigated in previous cross-cultural research. However, compared to other countries, Finnish men were also low on benevolent sexism.

The relationship between hostile sexism and benevolent sexism further illustrates the marked difference between Finland and other countries in ASI research as the relationship between the two subscales of the ASI is different in Finland than in any other country studied so far. The difference between the average scores of HS and BS was larger among Finnish men than it was among men in any other national sample except for Turkey.

Even more strikingly, in Glick et al.'s 2004 study women in all nations bar the Netherlands endorsed benevolent sexism more than hostile sexism (and in the Netherlands the difference was very small at .02). In contrast, Finnish women endorsed hostile sexism significantly more than they endorsed benevolent sexism (difference score .66). Therefore, it appears that in the present study Finnish women sanction hostility towards women who break gender roles and condemn benevolence that highlights dissimilarities between the sexes and emphasises women's dependence on men.

Furthermore, the correlation between the two scales was clearly lower among both sexes in the Finnish sample than the average correlations for men and women found by Glick et al. (2004). It appears that the Finns reject benevolent sexism very strongly in relation to how willing they are to accept the notions of hostile sexism. This indicates that among Finnish people hostile and benevolent sexism scales do not measure a complementary set of gender-traditional beliefs as argued by Glick et al. (2004, p. 725). Instead, they seem to be measuring two distinct concepts that could almost be named 'negative' vs. 'positive' stereotyping of women, the former of which the Finns are much more eager to accept.

These findings are further augmented by the Finnish samples' disinclination to agree with the hostility towards men scale, which is the third key finding of the present study. Both sexes in Finland scored lower on this scale than did men or women in any other country previously included in the Ambivalent Sexism research. Finnish men's average score was clearly below the midpoint of the scale thus indicating that on average Finnish men disagreed with the sentiments expressed in this measure. The low level of hostility towards men in Finland is particularly important as the Finns scored markedly higher on hostile sexism. Indeed, most other countries scoring high on hostile sexism also scored high on hostility towards men (Glick et al., 2004).

However, it's worth noting that the scores on hostility towards men are also very low among the English adult sample. Indeed, English and Finnish women scored nearly identically on HM, while the English men scored notably higher than the Finnish men. England is the only country in which men score higher than women on HM, although the difference between the sexes is not significant. Glick and colleagues (1999, 2004) have argued that hostility towards men is just another expression of belief in traditional gender roles and males' dominance over females, and that it demonstrates men's willingness to sacrifice likeability for dominance, and women's frustration over men's greater power.

Therefore, the present findings indicate that either the Finnish and English women do not perceive men to have much more power than they do, or that they are not bothered by the power differential. Taking into account that women in both countries have equal rights to men in terms of voting, working and sovereignty, the former explanation seems more likely. The low scores of men further support this hypothesis, as it seems that either Finnish or English men do not feel the need to justify their higher status by agreeing with items that imply them to have unpleasant dominant characteristics. However, the low scores of Finns on HM remain challenging to Glick et al.'s (2004) hypotheses regarding the relationship between HM and HS.

The difference score between the mean scores on hostile sexism and on hostility towards men was also larger among Finnish men than it was among any other national sample of men. A similar trend was observed when comparing Finnish women's scores on the HS and the HM scales. Furthermore, Finnish women differed from all national samples in Glick et al.' study as they endorsed hostile sexism clearly more than they endorsed hostility towards men. In Glick et al.'s 2004 study all national samples of women agreed more with the HM than they did with the HS.

The ASI and the AMI scores of the Finnish adult sample seem to break a number of trends established by Glick et al. in their cross-cultural research. However, it must be noted that the Finnish sample cannot be considered to be representative of its nation. Nevertheless, it can be considered to be equally representative as the samples included in the Glick et al.'s cross-cultural research. The current findings necessitate more research employing the ASI and AMI scales, as well as some other measures of gender stereotyping, to be carried out in Finland to firstly confirm the present findings, and secondly to examine the relationship between the ASI and the AMI and other measures of gender stereotyping and gender equality.

The present findings also suggest that Ambivalent Sexism research should be conducted in a wider variety of countries. The previous cross-cultural research in Ambivalent Sexism includes Anglophonic, Hispanic and, to some extent, Muslim countries, but Eastern cultures, Scandinavian countries and ex-Soviet countries are noticeably unrepresented. It may well be that responses from countries like Sweden and Norway or Russia and Estonia could be similar to those found in Finland.

In order to clarify and confirm the nationality, sex and age differences on ASI found in Study Three and Four, a secondary analysis was conducted in which the data sets from these studies were combined. This also allowed an examination of developmental trends in ASI as a comparison between the adolescent data in these earlier studies and the adult data collected in Study Five was now possible.

The secondary analysis supported the nationality hypothesis as the Finns scored higher than the English on hostile sexism. However, in contrast to the hypotheses, the nationality difference in scores was larger among girls than boys. In retrospect, this mirrors the sex and nationality differences of the English versus Finnish adult samples. Furthermore, the Finnish adolescents also scored significantly higher on benevolent sexism where no nationality effect had been hypothesised.

As predicted, the 12-year-olds agreed more strongly than the 15-year-olds with benevolent sexism items. This corroborates the supposition that younger participants do not view benevolent items as offensive towards women as the items' patronising undertone is not yet understood by the young adolescents. Furthermore, it is likely that younger girls in the samples did not appreciate that agreement with the seemingly positive statements actually have negative implications for women's equality with men.

The hypothesis that boys will endorse hostile sexism more than girls was supported. Interestingly, boys also scored significantly higher on benevolent sexism, where no sex difference was hypothesised. However, the significant sex difference on both scales is consistent with the sex effects found in adult samples in Finland and England[25]. The finding that boys scored higher than girls on both subscales is also consistent with Glick et al.'s (2004) argument that the two subscales measure different elements of the same phenomenon, i.e. endorsement of traditional gender roles.

Interesting developmental trends emerged when the two adolescent age groups were compared with the adult samples. Endorsement of hostile sexism seemed to develop differently in the two countries as in England, the older adolescents (both boys and girls) were more hostilely sexist than the younger, but the endorsement of these views declined sharply in adults. Among the English samples, the sex difference remained consistent throughout all three age groups. In Finland, the endorsement of hostile sexism was more constant throughout the three age groups, although male respondents' declined from strong agreement at 12 to milder agreement in adulthood.

It is noteworthy that among English males, the endorsement of hostile sexism increased from 12 to 15-year olds, at which point the English males scored equally high than the Finnish boys. This is an interesting effect that warrants further investigation into adolescents' ASI attitudes in England. The developmental changes in benevolent sexism were consistent across boys and girls and across nationalities as the endorsement of BS declined in a similar pattern for all these groups from 12-year olds to adults.

A key finding of the secondary analysis for Ambivalent Sexism research relates to the relationship between the two ASI subscales. Among the 12-year olds, the correlation between the two scales was not only non-significant among girls, but negative among boys. In Finland, this negative correlation was significant. These correlations imply that young adolescents do not perceive the two subscales to measure an interrelated concept, and that for boys in particular the two are completely disconnected to the extent that for Finnish 12-year old boys, agreement with one scale implies disagreement with the other.

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[25] English men score higher than English women on benevolent sexism but the sex difference is not significant

These results support the aforementioned possibility of Finnish people perceiving the hostile items as a ‘negative stereotyping of women’ scale, and the benevolent items as ‘positive stereotyping of women’, and being more inclined to support the former. For the 12-year-old Finnish boys this explanation could be intertwined with ingroup bias processes, whereby they ‘put down’ the outgroup in order to enhance their own group’s status. Especially the complementary gender differentiation items such as “Women have a better sense of right and wrong than men” could be seen as a red rag to adolescent boys who are still in the developmental phase where girls are thought to have ‘cooties’.

At 15 the difference between Finnish and English boys is remarkable as among the English boys the relationship remains near zero, while among the Finnish boys the correlation is moderately positive. Among the girls in two countries the correlation is near equal and mildly positive. The stark change in the relationship between the two scales among Finnish boys between the ages 12 and 15 requires further research, ideally with a longitudinal rather than a cross-sectional sample.

However, it could be that the Finnish boys in older adolescence begin to recognise the implications of benevolent sexism and understand that its societal implications are actually related to those of hostile sexism. Therefore those boys who endorse hostile sexism also agree strongly with the benevolent items. It could also be that as at 15 the relationship between girls and boys has recently changed into a more adult-like romantic association the boys are at the height of their 'knight in shining armour' phase, and take their protective duties towards women especially seriously. Because the same trend was not demonstrated among the English boys however, this explanation remains purely speculative.

The peculiarity of the Finnish 15-year-old boys' strong positive relationship between the two scales is further highlighted by the correlation coefficients among the adult samples where Finnish, as well as English men, demonstrated a mildly positive but non-significant relationship between the two subscales. Nevertheless, the overall trend in the relationship between the two scales indicates that the interdependence of the two scales becomes increasingly clear to people as they move towards adulthood, and that for the 12-year olds, at least in the current samples, the two scales appear as completely separate entities.

One limitation of the current research is that it cannot rule out the effect of cohort as an alternative explanation for the developmental trends identified. This study uses a cross-sectional design, and hence the effects of generation cannot be ruled out. It is possible that the younger cohorts of Finnish adolescents are more inclined to endorse benevolently sexist attitudes towards women. Although it is an unlikely explanation, it is possible that a backlash reaction towards gender equality has caused the younger generation to long for more traditional gender roles that are reflected in the BS scale. Future research should employ a longitudinal design in order to further examine developmental trends in ASI in children and adolescents.

Conclusions

The final study of this thesis demonstrated that Finland differs significantly from England and other Western democracies in the extent to which its people endorse the four subscales of Ambivalent Sexism. Chiefly, Finnish people appear to be much more willing to express hostile rather than benevolent sexism. Both sexes agreed more strongly with hostile than benevolent items, which was especially interesting given that in the cross-cultural Ambivalent Sexism research conducted to date, women in every other country have endorsed benevolent sexism more than hostile sexism. The strong endorsement of hostile sexism relative to benevolent sexism was further emphasised by Finns' reluctance to accept hostility towards men that has in previous research been found to positively correlate with endorsement of hostile sexism.

Overall, the Finnish adult data proves problematic for the cross-cultural theory of Ambivalent Sexism (Glick et al., 2000, 2004). The current data broke the trend hypothesised for the relationship between the overall endorsement of the ASI and gender equality as measured by GEM and GDI; between the endorsement of hostile and benevolent sexism; between gender gap on BS and endorsement of hostile sexism; and between endorsement of HS and hostility towards men. These findings raise the question of the universality of the ASI and AMI, and point to a need for further research in Finland as well as other cultures such as Scandinavia and ex-Soviet countries.

The comparisons of different age groups' Ambivalent Sexism attitudes implied that younger adolescents view the two subscales as distinct from one another. It is argued that this is related to ingroup bias that is still prominent at this age, as well as to girls' inability to realise the inherent costs for women embedded in benevolent sexism. The sex and nationality effects among adolescents on the two subscales did however mirror those found among the adult samples from the two countries.

Chapter 9: Summary and conclusions

Across five studies, this thesis investigated gender attitudes of English and Finnish children, adolescents and adults. The research aimed to investigate how gender roles, stereotypes and gender-based expectations are perceived by English and Finnish people in the 21st century and how these attitudes vary as a result of sex, age and nationality. The empirical studies of the present thesis demonstrated that although gender is no longer perceived as the sole determinant of what a person can do, specific gender roles and traditional gender stereotypes continue to be endorsed. This chapter summarizes the key findings of the thesis together with their theoretical and practical implications, discusses limitations of the present research, and outlines suggestions for future research.

Summary of the key findings

Study One

In Study One, secondary analysis was performed on Finnish and British ISSP data on family and work attitudes (N = 3313). The aim of the study was to explore differences in the attitudes as previous research has not compared the two nationalities, and as very little research exists on gender attitudes in Finland. Based on the existing international measures of gender equality, it was expected that the Finns would emerge as the *less* traditional nationality of the two.

The analyses yielded somewhat conflicting results in relation to nationality differences as the Finnish appeared to hold less gender-traditional attitudes about family and work roles, but to be clearly more traditional in their attitudes towards traditional family values. For example, the Finns agreed more than the Britons with the view that men should do more housework and childcare but also with the idea that “a job is alright, but what women really want is home and kids”.

The disparity of the results was attributed to nationality differences in history and perception of female employment. It was argued that the Finns’ less traditional views on gender roles in employment versus housework were due to them perceiving women’s full-time work as more normative than the Britons. Subsequent studies in this thesis were designed to further explore the differences in gender attitudes as the nationality effects were not in line with the hypothesis that Finland would be the less traditional nation of the two.

The results of Study One were consistent with previous research, which has shown that men hold more traditional views about gender than women (e.g. Glick & Fiske, 1996). In Study One men expressed clearly more traditional views about the importance of marriage, the advantages of nuclear family over single-parent families and about division of labour regarding earning vs. household tasks. Based on this and previous research, it was assumed that in the subsequent studies boys and men in both countries would express more traditional attitudes than girls and women.

Study Two

Study Two explored gender attitudes among English and Finnish children and adolescents (*N* = 1856). The aims of the study was to further explore the nationality effects on gender attitudes, to explore 21st century children and adolescents’ gender stereotypes and perceptions about their own futures, and to further understanding about the developmental trends in gender attitudes. The attitudes and stereotypes examined related to attitudes about academic ability, personality differences, occupational efficacy and family roles.

As Study One's results were contradictory in respect of nationality differences in attitudes among adults, Study Two further explored nationality effects among children and adolescents. The contradictory results of Study One were not replicated in Study Two as the Finnish children and adolescents expressed more traditional and stereotypical attitudes across the measures.

The Finnish being more traditional than the English was further highlighted by the interaction of nationality and age as, while the English became linearly less traditional with age, the Finns displayed a bell-shaped trend with the 11- and the 14-year olds expressing more traditional views than the 8- and the 16-year olds. The age effects were deemed challenging for cognitive theories (e.g. Kohlberg, 1966) that have hypothesised a universal trend of gender-attitude flexibility increasing with age. As predicted, boys expressed more traditional views than girls on all measures.

Among the most notable findings of Study Two was the clear gender differentiation of personality traits. Despite being given an option to say that a given trait can describe both sexes, participants attached many attributes to either men or women exclusively. The participants' views on which traits describe each sex followed the traditional assumption of women being expressive and men instrumental (Diekman & Eagly, 2000; Spence & Helmreich, 1978). Although this trend was not surprising based on previous literature, the fact that two thirds of the participants felt that 'brave' describes men only, and 'emotional' women only, demonstrated greater readiness to stereotype personality traits than had been expected.

Another key finding of Study Two was that boys and girls across nationalities and age groups perceived many occupations as only suitable for either males or females, and felt much greater efficacy for working in stereotype-consistent rather than inconsistent occupations in the future. The implications of such attitudes for two countries' labour markets are clearly detrimental as both currently struggle with skill and labour shortages in occupational areas that are most gender-typed (Millward et al., 2006). Although participants' occupational aspirations were broadly in line with Gottfredson's theory of Circumscription and Compromise (1981, 1996) they also highlighted that psychological theories on children and adolescents' career development require updating due to changes that have taken place in the labour market.

More encouraging was the finding that girls did not harbour any less ambitious occupational aspirations than boys. However, the future ambitions were clearly sex-segregated as boys wanted to become policemen or lawyers, while girls aspired to become beauticians or vets. Therefore, it seemed that the participants' aspirations were segregated by sex horizontally but not vertically. Based on the results of Study Two it was decided that consequent studies would examine personality and occupational stereotypes in greater depth.

Study Three

Based on the results of Study One and Study Two, Study Three sought to further examine stereotyping of instrumental and expressive personality traits. Both implicit and explicit measures were used in Study Three, which comprised of two adolescent age groups (N = 302) from England and Finland. The study also introduced and tested the Ambivalent Sexism Inventory (Glick & Fiske, 1996) that was modified for the use among an adolescent sample.

One of the most notable findings of Study Three was that, contrary to hypotheses based on a wealth of previous research using explicit measures and the findings of Study Two, in the implicit measure of personality stereotyping it was girls who expressed stronger association between males and instrumentality, and women and expressiveness. It was concluded that this effect was mostly due to either girls being more strongly influenced than boys by societal stereotypes, or boys simply being more accustomed to computerised tasks resembling the present implicit association test (IAT). The present findings have significant connotations for the debate surrounding the IAT research, as the lack of correlation between implicit and explicit measures and the unexpected gender effect suggest that the present IAT measured associations rather than attitudes.

The explicit measures of personality stereotypes were in line with Study Two's results, demonstrating that these two dimensions are strongly associated with men (instrumental) or women (expressive). Importantly however, Study Three also supported Spence and Buckner's (2000) argument that the gender gap in the *self-concept* of instrumentality is narrowing as girls and women score increasingly high thus reflecting actual changes in their roles during the past few decades. Study Three also highlighted the importance of ingroup stereotypes, as these were found to significantly mediate the effect of sex on self-concepts of instrumentality and expressiveness.

The Finns being more stereotypical and traditional than the English was again shown across the measures. This nationality effect was particularly strong on the hostile subscale of the ASI. This finding has important connotations for theory of Ambivalent Sexism as one of its main arguments has been that scores on the ASI are negatively correlated with international measures of gender empowerment (Glick et al., 2002, 2004). As discussed in Chapter 3, Finland scores notably high on such measures, including the Gender Empowerment Measure used by the UN. Because the ASI scale was modified for use among adolescent sample in Study Three, it was deemed necessary to try to replicate the sex and nationality effects found.

Study Four

Study Four sought to further examine vertical occupational gender stereotypes and ambivalent sexism among English and Finnish adolescents (*N* = 304). Furthermore, Study Four aimed to test Social Role Theory's (Eagly, 1987) premise that perceptions of unknown people are strongly determined by the role they are thought to occupy. Study Four included both implicit and explicit measures of gender attitudes on managerial versus subordinate occupational roles and personality stereotypes.

The results of Study Four showed that the participants perceived leadership as a masculine trait. Even girls, who as a group showed keenness to personally select a female for a leadership role, assumed that a hypothetical company would hire a male as a leader and a female as an assistant. The association between power and maleness was clearly stronger among the Finnish than it was among the English.

The results of Study Four replicated Study Three's finding of Finnish adolescents scoring significantly higher than the English on the hostile subscale of the ASI. Furthermore, because of the effects nationality and age had on endorsement of benevolent sexism, it was decided that the final study of the thesis would focus on the theory of Ambivalent Sexism. This decision was based on the implication that Finnish scoring notably high on hostile sexism has on cross-cultural theory of Ambivalent Sexism, as well as on the fact that a further study utilizing ASI among a Finnish adult sample would enable an examination of developmental trends in endorsement of ambivalent sexism.

Study Five

The final study of the thesis sought to elucidate the consistent finding of Finnish participants being more traditional and gender-stereotypical than the English. To this end, Ambivalent Sexism and Ambivalence Towards Men inventories (Glick & Fiske, 1996, 1999) were administered to a Finnish adult sample (*N* = 204), and secondary analysis was performed on the combined data sets of Studies Three and Four (*N* = 606). Study Five compared the Finnish adult sample to other national samples (Glick et al., 2004), and examined developmental trends in the endorsement of ambivalent sexism among English and Finnish samples.

Study Five demonstrated that the Finnish adult data does not fit the model of ASI and AMI relationships proposed by Glick et al. (2004). Firstly, the Finns scored notably high on hostile sexism and notably low on both benevolent sexism and hostility towards men. Secondly, Finnish women, unlike women of every other nation so far included in the ambivalent sexism research, scored higher on hostile sexism than they did on benevolent sexism. Thirdly, the Finnish data broke the pattern of ambivalent sexism negatively correlating with measures of gender equality within countries.

The secondary analyses showed the youngest participants to view the two subscales as very distinct from one another. It was argued that they may have perceived the benevolent scale to consist of positive sentiments towards women while viewing the hostile subscale as negative in connotation. As discussed under ‘Theoretical implications’, these results imply that Glick et al.’s (1996, 1999) argument of the two subscales measuring an overall belief in traditional gender roles may not be applicable to children or young adolescents.

Potential limitations of research

Across the five studies cross-sectional rather than longitudinal samples were employed. Therefore, it is possible that the age effects found were actually effects of a cohort rather than cognitive or social development. The effect of cohort could be particularly strong on the attitudes examined in the present thesis as the roles of the two sexes have evolved notably during the past few decades.

For example, it could be argued that the entry of women to labour market and the diminishing number of stay-at-home mums could have affected the age groups included in the present research in different manners. It may be possible that the 16-year olds in the present research have grown up to take their gender roles as more for granted than the 8-year olds. On the other hand it could be that the younger age groups included in the present research do not appreciate the greater flexibility of gender roles, and express more traditional views as they long for the greater clarity of traditional roles. However, as the age effects are not consistent with either of the above hypotheses, it is unlikely that the effect of cohort was significant. Furthermore, the age difference between the youngest and oldest non-adult participants in the present thesis was eight years, which denotes that although some societal changes have taken place, the changes have not been fundamental in terms of, for example, women's labour force participation or men's involvement in childcare.

The drawbacks of using cross-sectional samples could only be avoided by conducting longitudinal research. However, in order to investigate age range as wide as included in the present research (from eight to adults) a long-term commitment would be required from researchers, research councils and participants. Such methodology is unsurprisingly much beyond the scope of the present thesis. Nevertheless, it is important to study gender attitudes in a longitudinal sample as this offers the only way to examine whether age differences found in the present research are due to societal influences, developmental phases or the interaction of societal changes and age.

Another shortcoming of the present research was that after the significant age effects between child and adolescent age groups were found in Study Two, further studies only included adolescents or adults. The decision to exclude younger age groups from Studies Three and Four was made because the measures used in these studies were deemed too complex for younger children. However, this meant that the age effects found in Study Two were not further explored or replicated. Particularly, the found bell-shaped trend among the Finnish sample on stereotyping and traditionality measures warrants further research, as it contradicts the assumption that stereotyping and gender traditionality decline linearly with age.

In terms of methodology, it would have been valuable to carry out further research using implicit measures, and the IAT in particular. Specifically, the IAT used in Study Three could have been repeated in a different sample in order to investigate whether the found sex effect could be replicated. The replication is warranted not only as the sex effect was in unexpected direction, but also because the IAT employed used positive stimuli only instead of the routinely used positive – negative divide. The use of positive stimuli only was deemed theoretically advantageous as it eliminated the influence of ingroup bias from the present IAT. It is hoped that the author's future post-doctoral research could further investigate these issues.

It would also have been both beneficial and interesting to include some qualitative measures in the present thesis. Although the present findings have given a comprehensive view of the gender stereotypes, role assumptions and future expectations held by the Finnish and English samples, it has not been possible to ask participants to explain their answers or to elaborate on their views. For example, it would be extremely interesting to ask “Why?” from a 16-year old boy who argued that when they have children they will do much more childcare than their partner.

Theoretical implications

Personality stereotyping

The present findings demonstrated that although the two sexes were still deemed to differ in the extent to which they, as a group, were instrumental or expressive, the self-perceptions of instrumentality in particular did not differ greatly among boys and girls. Theoretically, these findings support the work of Spence and Buckner (2000) who argued that due to the greater diversity of female roles in modern society, women are seen as more similar to men than they were during the times when their roles consisted more exclusively of those of mother and wife. It seems however that these societal changes have had a greater impact on self-perceptions of girls rather than on the stereotypes held about personalities of women overall.

Personality related findings in this thesis are strongly supportive of Social Role Theory (Eagly, 1987), according to which the way people are perceived is strongly determined by the role they are thought to occupy. This was indeed the case in Study Four, where the occupations of target individuals appeared to completely override their gender in guiding the participants’ evaluations of them. That a female manager was evaluated as much more instrumental than the male manager, and that the male assistant was thought to be more expressive than the female assistant actually showed that the occupational roles, particularly when incongruent with gender stereotypes, were even stronger determinants of perceptions than Social Role Theory's hypotheses suggested.

Furthermore, the findings also indicated that despite the increasing flexibility of gender roles, people in gender incongruent roles are still deemed as very different from the archetype of their sex. This suggests that the societal changes have affected self-perceptions and assumptions about men and women in general very differently. Overall, that the hypotheses of Social Role Theory were so strongly supported despite the use of rather mundane occupational roles demonstrates the strong influence of gender congruent versus incongruent roles. It may be interesting to test Social Role Theory's hypotheses with more strongly counter-stereotypical roles (e.g. a house husband and a female lorry driver).

The dissociation demonstrated between girls' self-perceptions and the sex stereotypes of women as a group has important connotations for both Social Role Theory and gender stereotyping research overall. According to Social Role Theory (Eagly, 1987) seeing women enter traditionally male roles should have impacted in particular the stereotypes of women as a group. In contrast, the present findings indicate that the societal changes have caused self-perceptions rather than group stereotypes to become less traditional.

The dissociation found could be due to girls perceiving themselves as different from, and as less stereotypical than, present-day adult women. If younger girls separate themselves from the group 'adult women' they probably don't see the difference between their self-perceptions and their perceptions of adult women as problematic. Future research could investigate this further by asking girls to rate themselves on expressiveness and instrumentality as they are now, and as they expect themselves to be once they are adults.

This measurement would allow inferences to be made about the nature of self-stereotyping among females. The stereotypes of women have been found to change at more rapid pace than are those of men (Spence & Buckner, 2000), as women's roles in society have arguably changed more than have men's. Therefore, the stereotypes held about women are more dynamic than are the stereotypes of men. Furthermore, it could be that women's self-perceptions are also dynamic within individuals as they could notably evolve with age.

For example, it could be that during adolescence and early adulthood the self-perception of instrumentality is higher as education and early career development are viewed as priorities, and as direct competition with male peers is unavoidable in order to reach the best possible career outcomes. However, the self-perception of expressiveness and the gender-gap in perceptions of instrumentality may increase as women enter the wife and mother roles, and possibly give up the employee role thus becoming financially reliant on a male partner.

Therefore it could be that the importance Social Role's theory placed on overall position of women in society would be better placed on individual's own position. A young girl who outperforms her male peers at school and is praised by teachers and parents for ambition and determination is likely to perceive herself as high on instrumentality. She may also perceive her female peers high on instrumentality but this perception does not extend to adult women as a group, perhaps because such girl's most likely model of adult women is her mother, who regardless of her instrumentality is likely to appear to her daughter as above all compassionate, loving and caring. It could also be that society as a whole deems instrumental qualities desirable in girls and young women, but as women enter what society views a 'child-bearing age', the desirability of having expressive qualities increases, and instrumental qualities become to be perceived as counter-stereotypical and in conflict with the appropriate 'adult-female' roles.

Occupational stereotyping

Overall, the findings of this thesis relating to occupational aspirations of children and adults were in line with Gottfredson's theory of Circumscription and Compromise (1981, 1996). However, there were some differences between present findings and Gottfredson's theory, which are probably due to the societal changes that have occurred in past 25 years. Most notable of these is the emergence of the 'culture of celebrity' that now dominates the popular culture, and consequently effects the occupational aspirations of children and adolescents (Hill, 2005). In a review of her theory, Gottfredson (1996) noted that 'unrealistic' aspirations exist and termed these 'idealistic aspirations'. However, the emergence of new importance placed on celebrity and the consequent lifestyle is a phenomenon that should be further explored, and incorporated into existing theories on occupational aspirations.

The present findings further highlighted the need for revision of theories on occupational attitudes of children and adolescents by demonstrating how sex stereotypes about occupations have changed as a result of distribution of men and women into different occupations. In line with

Social Role Theory (Eagly,1987), the self-efficacy beliefs and aspirations of participants in the present studies demonstrated that due to entry of women into many previously 'male-only-occupations', today's girls see no reason why they couldn't become doctors, lawyers or entrepreneurs. The findings were also supportive of Social Role Theory (Eagly, 1987) as they showed that boys' attitudes toward 'female' occupations have not changed. This reflects the fact that women's entry into male roles has not been mirrored by men's entry into female occupations, and that men have not significantly increased their share of performing housework or childcare.

In order to be more applicable to aspirations of today's children and adolescents theories such as Gottfredson's theory of Circumscription and Compromise (1981, 1996) need to take into account women's entry into 'male' occupations, the increased value children attach to fame and wealth as well as the concept of work-life-balance that was hardly debated ten years ago. It seems that the past decade has witnessed an increase in the proportion of 'idealistic aspirations' that involve assumptions about being famous and rich and includes as 'typical' occupation aspirations roles such as footballer (e.g. David Beckham), model (e.g. Kate Moss), pop-star (e.g. Christina Aguilera), actor (e.g. Johnny Depp) and multimillionaire entrepreneur (e.g. Richard Branson). Theories on occupational aspirations should examine if and when such aspirations are given up, and how they affect the pursuit of more 'normal' aspirations.

Ambivalent Sexism

As discussed above, Finnish data on ambivalent sexism broke the trends both between gender equality of nation and the endorsement of ambivalent sexism, and between the different subscales of ASI and AMI demonstrated by Glick and colleagues in their two cross-cultural studies (2000, 2004). The possible reasons for this were discussed in Chapter 8, and it was concluded that for some reason the Finns do not appear to perceive endorsement of hostile sexism to contradict their perception of female work as a norm or with their idea of Finland as a haven for gender equality.

These findings question the universality of Glick et al.'s hypotheses (2000, 2004) and highlight the need for further cross-cultural research in a wider variety of countries. Especially crucial for ambivalent sexism research would be the inclusion of other Nordic or Scandinavian countries, as well as former Easter Block countries such as Russia, Estonia or Poland. Indeed, after the present findings of endorsement of ASI and AMI in Finland, it seems unfounded to draw conclusions about the relationships either between national indices of gender equality and ambivalent sexism, or between the four subscales, before further studies with a greater variety of nationalities has been conducted. Also, Ambivalent Sexism research would benefit from inclusion of Hofstede's cultural indices (1996) in its analyses as it could be that for example a score on the femininity-masculinity dimension correlates with endorsement of ambivalent sexism.

The present findings also indicated that younger participants perceived the two subscales of ASI as two conceptually different entities. It seemed that among the 12-year olds, the benevolent subscale was viewed as positive in connotation towards women and was therefore negatively correlated with the hostile subscale. This negative relationship was strong among boys who were assumed to have rejected the benevolent items partly due to ingroup bias still dominant at this age. These findings warrant further investigation as it would be important to further explore when the understanding of the two scales changes into appreciation that the sentiments of two scales are intertwined.

Furthermore, the finding that the correlation among the two ASI subscales was notably low among the Finnish adult sample implies that Glick et al's (1996, 2000, 2004) supposition of the two measuring the different sides of the same coin may be subject to stronger cultural variation than the authors of the theory have assumed. The possibility of dissociation between the subscales was further highlighted by both English and Finnish samples' low scores on hostility towards men. This implied that the endorsement of one subscale does not lead to endorsement of the others as argued by Glick and colleagues (2000, 2004) and that women in hostilely sexist cultures do not necessarily endorse benevolent sexism or hostility towards men.

Indeed it seems that the relationships between the subscales, rather than the endorsement of ambivalent sexism as argued by Glick et al., are determined to a great extent by the gender equality of a given country. That both Finnish and English adults (as well as Australian and American, see Figure 3 on p. 262) reject the hostility towards men items indicates that in countries where women have equal rights in terms of voting, employment and personal independence, hostility towards men is not endorsed by women as means of expressing resentment towards male dominance, or by men as a justification for greater power. It could be argued that rejection of hostility towards men implies that both sexes share a view that that women are not oppressed by men and that hence 'putting men down' by agreeing with the items of hostility towards men is not deemed necessary by either sex.

Practical implications

Brave men and compassionate women?

The participants' eagerness to assign personality characteristics to either men or women exclusively in Study Two was somewhat surprising. However, the subsequent studies demonstrated that while the two sexes were deemed to be different from one another on the instrumentality – expressiveness dimension, the self-concepts, particularly on instrumentality, were rather similar for girls and boys. Study Three showed that when the ingroup stereotypes were accounted for, the sex differences in self-concepts of instrumentality and expressiveness were very slight. Study Four in turn demonstrated that self-concept of instrumentality was the strongest predictor of the assumption that one will be successful, in career terms, as an adult.

Because of this significant relationship, it is encouraging that the gender gap in instrumentality self-concept appears to be narrowing. That girls' future aspirations, in terms of the occupational status of ideal jobs, were equal to those of boys is supportive of the argument that girls' self-concept of instrumentality is on the increase. The disparity between the finding that men and women are still perceived to have very different personality characteristics and the finding that girls' aspirations are as ambitious as those of boys' implies that the difference in personalities is not necessarily deemed as a precursor of different roles in terms of status.

Indeed it seems that today's girls might be keen to differentiate their own sex, as a group, from males while still perceiving themselves as just as ambitious and determined than their male peers. It also seems that the perceived innate differences in personality of the two sexes no longer hinder girls' personal career aspirations. Although their aspirations were somewhat different from boys in terms of actual occupations, they did not differ in terms of social status or prestige. Also, girls were just as likely as boys to nominate high prestige occupations lawyer and doctor as their aspiration.

Overall, these results indicate that the 21st century girls do not view it necessary for themselves to be like men in order to succeed in the labour force. They do however view instrumental qualities as important, and perceive themselves as hardly less ambitious or independent than do boys. Nevertheless, the fact that in Study Four the female manager was assumed to be extremely instrumental and very low on expressiveness implies that today's adolescents still assume a female in a 'masculine' role to be unlike a stereotypical woman. Therefore, and as discussed under 'Theoretical Implications', the perceptions of adult women and the stereotypes of the two sexes as groups seem to differ significantly from the self-perceptions and future assumptions that girls in the present research held.

It may be useful to investigate what personality traits children and adolescents deem necessary for success in different occupational roles. For example, knowing which traits are perceived as crucial for occupations where labour shortages are most acute could guide the campaigns encouraging young people into gender-atypical occupations. For example, based on the present findings it may be important to emphasise that childminders too need to be brave while compassion is not a quality gone to waste in business managers.

Maybe girls and women don't want to be equal?

Throughout the literature review as well as the empirical chapters it was clear that boys and men are more traditional and gender stereotypical than are girls and women. It also transpired that in general 'the stronger sex' seems quite happy to hold on to traditional gender roles whereby men work hard at a job but relax at home while women take care of the household work and exercise less power in the society. The only finding conflicting with this overall trend was the adolescent boys' assumption of performing substantial amount of childcare once they become fathers. This assumption is in line with recent research findings showing that today's men, the fathers of the boys in the present samples, are significantly more involved in childcare than their own fathers ever were (Equal Opportunities Commission, 2006).

More surprising however was that some findings in the present research implied both non-adult and adult females also to have mixed feelings about the gender roles of men and women. In Study One, a large proportion of both Finnish and British women said that ideally they would not work at all or work part-time when their children are young. The proportion of women expressing such wishes far exceeded the proportion of mothers in the sample whose current work status was 'out of labour force', 'housewife' or 'part-time employment'. The disparity between the actual work status of mothers and ideals about employment during motherhood was even larger in Finland, 'the promised land of gender equality', than it was in the UK.

In Study Two, girls assumed that in the future they will do more of both housework and childcare than their partners. In Study Three girls' stereotype congruent associations between females and expressive qualities, and males and instrumental qualities, were stronger than were boys'. In Study Four girls expressed great scepticism about a large company hiring a woman as a manager and among the Finnish sample majority of girls would have personally chosen a male candidate over a female candidate too. In Study Five, Finnish women scored extremely high on hostile sexism, and rejected the sentiments of benevolent sexism that are, in other hostilely sexist countries, typically endorsed by women.

The fact that the Finns, who arguably live in a more gender equal society than the English, displayed more stereotypical views than the English could be a sign of a 'backlash' reaction towards the decreasing gap between the roles of the two sexes. If this is the case, the Finnish adult women's answers in Study One and Study Five imply that this backlash is not only felt among men, but to some extent among women too. The results showing a desire to work fewer hours at a paid job when children are young and the assumptions that a career woman, as portrayed by the female manager in Study Four, is notably instrumental and hardly expressive at all may indicate a desire for a life less pressured by multiple roles.

As Fast (2006) argued, the evolution and shattering of female roles has opened new avenues for women, and allowed greater independence of men. However, it has also brought along uncertainty and ambiguity about appropriate roles that many young women possibly perceive confusing and overwhelming. Furthermore, Fast (2006) argued that never before have young women been facing pressures such as they do in the current society. Today's girls need to perform well at school and university, and they are expected to build a career that allows them to be financially independent. Building a career and looking for best employment opportunities places young women in a direct competition with men, who are still largely at advantage when it comes to hiring and promotion decisions.

During the years of competing with men for jobs, promotions and pay rises, women nevertheless need to be wary of appearing 'unladylike'; competitive, assertive or forceful, which are all traits still deemed unpleasant in women but desirable in men. Furthermore, as women's fertility starts to rapidly decrease around the 35th birthday, women are under more biological pressures than men to 'settle down' and have children. Faced with such conflicting pressures, it could be that some young women long for simpler times when expectations of them were less numerous.

However, it could be that the sole reason for females in the present research expressing some agreement with traditional gender roles is simply that they do not currently receive enough support for coping with multiple roles. If the employed mothers in Study One are primarily responsible for doing the housework and childcare *on top* of working full-time at a paid job, it is not surprising if they would *ideally* not work at all. Similarly, the Finnish mothers expressing wishes to work-part time rather than full-time may well be an indicator of them currently finding it hard to cope with the conflicting demands.

If today's girls and young women see their mothers struggling with the demands of work, housework and childcare they may be discouraged from 'wanting it all'. If they deem it unlikely that their future partners will be more helpful, or that society will do more to support multiple roles, they may view it more feasible to either stick with the more traditional female role or to not have children at all. Rapidly declining fertility rates across Western democracies demonstrate that an increasing numbers of women are choosing career success or freedom of childless life over the traditional role of a mother.

Similarly, it could be that the younger generation of males has witnessed their mothers being overstretched with multiple demands and their fathers being asked to do more around the house by exhausted partners. Due to their exposure to such conflicts, some 21st century boys may well have become to agree with the American journalist Michael Noer who recently wrote a 'word of warning' for men stating: "Marry pretty women or ugly ones. Short ones or tall ones. Blondes or brunettes. Just, whatever you do, don't marry a woman with a career". Noer (2006) based his 'warning' on different research findings that have apparently showed career women to be more likely than housewives to fall out of love with their husbands, to be unfaithful, to have fewer children and to spend 1.9 fewer hours mopping and dusting each week.

In a novel 'Man and Wife', a husband and a father Harry observed:

"There was something about the mothers that baffled me. They were all well-educated, intelligent women who had grown up reading their Germaine Greer and Naomi Wolfe, women who had gone into the world and made serious money from high-powered careers, often raising their children alone.

But inside their Lucy Doll Playhouses, their little girls pretended to be women who were nothing like them. They cooked, cleaned and fretted about when Ibiza DJ Brucie Doll might deign to come home. For hours on end, they preened, they posed, got lost in the mirror. They aspired to be all that their mothers had fled from."

- Tony Parson (2002). Man and Wife, p. 38.

It may well be that the scene Harry witnessed at his step-daughter's birthday party was more due to the developmental phase of children than a significant shift in little girls' aspirations within two generations of women. However, the above passage highlights the permanent nature of perceptions held about men and women's roles. If little girls who have throughout their lives witnessed their mothers wearing suits, going to meetings and being too tired to do the ironing still play 'houses' instead of 'offices', it could be argued that there is indeed something innate about the traditional division of labour.

However, the biological differences between the two sexes and their social roles needn't result in inequality or coercive reproduction of the traditional roles among younger generations. The results of the present thesis have demonstrated that today's children and adolescents do not view their futures excessively determined by their sex, and especially girls perceive themselves able to pursue occupations that their grandmothers' generation would not have even dreamt about.

Nevertheless, the same determined girls, future lawyers and actresses, also assume that they will do significantly more housework and childcare than their future partners. They also seem to believe that while they personally are highly ambitious and achieving, as a whole their own sex remains notably lower on instrumentality than men. On the other hand, the 21st century boys seem to be rather content to preserve the existing status quo of the two sexes and to continue in their grandfathers' steps as the main earner who doesn't get involved with cleaning or doing the dishes. However, the same boys assume that once they have their own families, they will be active participants in childcare to the extent where they'll do more nappy changing and entertaining than their future partners.

Based on these results, it seems reasonable to conclude that today's boys and girls have similar aspirations in terms of careers and parenthood. Girls do not appear to think that their sex limits their career choices or their early career, but are however conscious of the effects that future motherhood can have on their career prospects and on the way earning and household tasks will be divided. On the other hand boys seem to be more eager than girls to maintain more traditional gender roles while expecting great involvement in future childcare. Overall, the research presented in this thesis has demonstrated that increasing flexibility in gender attitudes is not a result of homogenization of the two sexes but instead based on recognition that despite being different, both males and females can pursue various roles based on individual preferences rather than biological sex.

References

Aboud, F.E. 1988. *Children and prejudice*. New York: Blackwell

Abrams, V. (2001). *Ideals of Womanhood in Victorian Britain*. http://www.bbc.co.uk/history/trail/victorian_britain/women_home/ideals_womanhood_01.shtml.

Aiken, L.R. (1987). Formulas for Equating Ratings on Different Scales. *Educational and Psychological Measurement, 47*, 51-54.

Albert, A.A. & Porter, J.R. (1983). Age patterns in the development of children's gender-role stereotypes. *Sex Roles, 9*(1), 59-67.

Allport, G.W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.

Ambady, N., Shih, M., Kim, A., & Pittinsky, T. L. (2001). Stereotype Susceptibility in Children: Effects of Identity Activation on Quantitative Performance. *Psychological Science*, 12(5), 385-390.

Antill, J., Cunningham, J. & Cotton, S. (2003). Gender-role attitudes in middle childhood: in what ways do parents influence their children? *Australian Journal of Psychology, 55*, 3, pp. 148-153(6).

Archer, J. (1984). Children's attitudes towards sex-role division in adult occupational roles. *Sex Roles, 10* (1/2), 1-10.

Arulampalam, W., Booth, A.L., Bryan, M.L. (2005). *Is There a Glass Ceiling Over Europe? An Exploration of Asymmetries in the Gender Pay Gap across the Wages Distribution.* Institute for Social and Economic Research Working Paper Series.

Annual Survey of Hours and Earnings (2005). Office for National Statistics. *On-line edition*. Retrieved from http://www.statistics.gov.uk/StatBase /Product.asp.

Aries, P. (1962). *Centuries of Childhood.* New York: Vintage Books.

Astin, A.W., Parrott, S.A., Korn, W.S. & Sax, L.J. (1997). *The American freshman: Thirty year trends, 1966-1996*. Los Angeles: Higher Education Research Institute, UCLA.

Badawi,J.A. (1971). The status of women in Islam. *Al-Ittihad, 8*,2, Shaban.

Bakan, D. (1966). *The duality of human existence*. Oxford, England: Rand McNally.

Banaji, M. & Greenwald, A. (1995). Implicit gender stereotyping in judgements of fame. *Journal of Personality and Social Psychology, 68*, 181-198.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child Development, 72*, 187-206.

Bauer, P J., & Coyne, M. J. (1997). When the name says it all: Preschoolers' recognition and use of the gendered nature of common proper names. *Social Development, 6*, 271-291.

BBC. (2006). *GCSE results have improved again*. Retrieved on August 24, 2006 from http://news.bbc.co.uk/1/hi/education/5278774.stm.

Beere, C.A. (1990). *Gender roles: A handbook of tests and measures*. San Francisco: Jossey-Bass.

Bem, S.L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology, 42*, 155-162.

Bem, S.L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review, 88*, 354-364.

Benbow, C.B. (1988). Sex differences in mathematical reasoning ability in intellectually talented preadolescents: Their nature, effects and possible causes. *Behavioral and Brain Sciences, 11*, 169-232.

Benbow, C. P., & Minor, L. L. (1986). Mathematically talented students and achievement in the high school sciences. *American Educational Research Journal, 23*, 425-436.

Benbow, C. P., & Stanley, J. C. (1982). Consequences in high school and college of sex differences in mathematical reasoning ability: A longitudinal perspective. *American Education Research Journal, 19*, 4, 598-622.

Best, D.L. & Williams, J.E. (1993). A cross-cultural view-point. In A.E. Beall & R.J. Stenberg (Eds.), *The psychology of gender* (pp. 215-248). New York: Guilford Press.

Beyer, S. (1999). The accuracy of academic gender stereotypes. *Sex Roles, 40*, 787-813.

Bigler, R.S., Jones, L.C. & Lobliner, D.B. (1997). Social categorization and the formation of intergroup attitudes in children. *Child Development, 68*, 530-543.

Blair, I. & Banaji, M. (1996). Automatic and controlled processes in stereotype priming. *Journal of Personality and Social Psychology, 70*, 1142-1163.

Blee, K.M. & Tickamyer, A.R. (1995). Racial differences in men's attitudes about women's gender roles. *Journal of Marriage and Family, 57*, 21-30.

Boldizar, J.P. (1991). Assessing sex typing and androgyny in children: The children's sex role inventory. *Developmental Psychology, 27*, 505-515.

Boldry, J., Wood, W., & Kashy, D. A. (2001). Gender stereotypes and the evaluation of men and women in military training. *Journal of Social Issues, 57*, 689-705.

Bourke, J. (2003). Women on the Home Front in World War One. Retrieved on July 11, 2006 from http://www.bbc.co.uk/history/british/britain_wwone/women_employment_01.shtml.

Bowlby, J. (1951). *Maternal care and mental health.* New York: Columbia University Press.

Brewer, M. B., Ho, H., Lee, J., & Miller, N. (1987). Social identity and social distance among Hong Kong school children. *Personality and Social Psychology Bulletin, 13*, 156-65.

Broverman, I.K., Vogel, S.R., Broverman, D.M., Clarkson, F.E. & Rosenkrantz, P.S. (1972). Sex-role stereotypes: A current appraisal. *Journal of Social Issues, 28,* 59-78.

Bryan, M., Arulampalam, W. & Booth, A. (2006). *Is there a glass ceiling over Europe? Exploring the gender pay gap across the wages distribution.* Technical Report Discussion paper no.510, CEPR, ANU.

Bukowski, W.M., Gauze, C., Hoza, B. & Newcombe, A.F. (1993). Differences and consistency between same-sex and other-sex peer relationships during early adolescence. *Developmental Psychology, 29*, 255-263.

Burt, K & Scott, J. (2002). Parent and adolescent gender role attitudes in 1990s Great Britain. *Sex Roles, 46*, 239-245.

Butcher, J.E. (1989). Adolescent girls' sex role development: Relationship with sports participation, self-esteem and age at menarche. *Sex Roles, 20*, 575-593.

Cabrera, N.J., Tamis-LeMonda, C.S., Bradley, R.H., Hofferth, S., & Lamb, M.E. (2000). Fatherhood in the twenty-first century. *Child Development, 71*, 127-136.

Carter, D.B. & Patterson, C.J. (1982). Sex-roles as social conventions: The development of children's conceptions of sex-role stereotypes. *Developmental Psychology, 18*, 812-824.

Cassidy, S. (2005, September 11). Celebrity obsession is turning nasty, academics warn. *The Independent.*

Cherlin, A. & Walters, P.B. (1981). Trends in United States men's and women's sex-role attitudes: 1972 to 1978. *American Sociological Review, 46*, 453-460.

Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity and compliance. In D. T. Gilbert & S. T. Fiske (Eds.), *Handbook of Social Psychology* (4 ed.,Vol. 2, pp. 151-192). New York, NY, US: McGraw-Hill.

Clarke, J. (n.d.). *Children and Childhood.* Retrieved on August 25, 2006, from http://www.blackwellpublishing.com/content/BPL_Images/Content_store/Sample_chapter/.

Closson, D. (2000). *The Feminization of American Schools.* Retrieved on March, 2006 from http://www.leaderu.com/orgs/probe/docs/fem-schools.html.

Coker, D.R. (1984). The relationships among gender concepts and cognitive maturity in preschool children. *Sex Roles, 10*, 19-31.

Commission of the European Communities (2004). *Report on equality between women and men, 2004.* Brussels.

Condry, J. (1984). Gender identity and social competence. *Sex Roles, 2* (5/6), 485-511.

Cowan, G. &Hoffman, C.D. (1986). Gender stereotyping in young children: Evidence to support a concept-learning approach. *Sex Roles, 14*, 211-224.

Cross, S.E. & Madsen, (1997). Models of the self: Self-construals and gender. *Psychological Bulletin, 122.*

Dasgupta, N., Greenwald, A.G. & Banaji, M.R. (2003). The First Ontological Challenge to the IAT: Attitude or Mere Familiarity? *Psychological Inquiry, 14* (3/4), 238-243.

Department of Enterprise, Trade and Investment (2006). *Annual Survey of Hours and Earnings.*

Department of Trade and Industry (2006). *Work and families, choice and flexibility: additional paternity leave and pay.*

Désert, M. & Leyens, J.P. (2006). Social comparison across cultures: I. Gender stereotypes in high and low power distance cultures. In S. Guimond (Ed.), *Social Comparison and Social Psychology: Understanding cognition, intergroup relation and culture* (pp. 303-317). Cambridge, England: Cambridge University Press.

Dex, S. (2003). *Families and Work in the 21st Century.* York: Joseph Rowntree Foundation.

Diekman, A.B. and Eagly, A.H. (2000). Stereotypes as dynamic constructs: Women and men of the past, present, and future. *Personality and Social Psychology Bulletin, 26*, 1171-1188.

Eagly, A.H. (1987). *Sex differences in social behaviour: A social-role interpretation.* Hillsdale, NJ: Erlbaum.

Eagly, A.H. & Karau, S.J. (1991). Gender and the emergence of leaders: A meta-analysis. *Journal of Personality and Social Psychology, 60*, 685-710.

Eagly, A.H. & Mladinic, A. (1989). Gender stereotypes and attitudes toward women and men. *Personality and Social Psychology Bulletin, 15*, 543-558.

Eagly, A.H. & Mladinic, A. (1993). Are people prejudiced against women? Some answers from research on attitudes, gender stereotypes and judgement of competence. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology*, (5, pp. 1-15). New York: Wiley.

Eagly, A.H. & Steffen, V.J. (1984). Gender stereotypes stem from the distribution of women and men into social roles. *Journal of Personality and Social Psychology, 46*, 735-754.

Eagly, A. H., & Steffen, V. J. (1986). Gender and aggressive behavior: A meta-analytic review of the social psychological literature. *Psychological Bulletin, 100*, 309-330.

Eagly, A.H. & Wood, W.E. (1991). Explaining sex differences in social behaviour: A meta-analytic perspective [Special Issue]. *Personality and Social Psychology Bulletin, 17*, 306-315.

Eagly, A.H., Wood, W. & Diekman, A.B. (2000). Social role theory of sex differences and similarities: A current appraisal. In T. Eckes & H.M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 123-174). Mahwah, NJ: Erlbaum.

Eccles, J.S. (1987). Adolescence: Gateway to gender-role transcendence. In D.B. Carter (Ed.), *Current Conceptions of sex roles and sex typing: Theory and research* (pp. 225-241). New York: Praeger.

Eccles, J. S., Jacobs, J. E., & Harold, R. D. (1990). Gender role stereotypes, expectancy effects, and parents' socialization of gender differences. *Journal of Social Issues, 46*, 183-201.

Eccles, J. S. (1992). School and family effects on the ontogeny of children's interests, self-perceptions, and activity choices. In J. E. Jacohs (Ed.), *Developmental perspectives on motivation, Nebraska symposium on motivation* (pp. 145-208). Lincoln, NE: University of Nebraska Press.

Eccles, J. S. (1994). Understanding women's educational and occupational choices. *Psychology of Women Quarterly, 18*, 585-609.

Eccles, J. S., Barber, D. M., & Jozefowicz, D. L. (1999). Linking gender to educational, occupational, and recreational choices: Applying the Eccles et at. model of achievement-related choices. In W. B. Swann, J. H. Langlois, and L. A. Gilbert (Eds.), *Sexism and stereotypes in modern society: The gender science of Janet Taylor Spence* (pp. 153-198). Washington, DC: APA Press.

Eccles, J. S., & Harold, R. D. (1992). Gender differences in educational and occupational patterns among the gifted. In N. Colangelo, S. G. Assouline, & D. L. Ambroson (Eds.), *Talent development: Proceedings from the 1991 Henry B. and Jocelyn Wallace national research symposium on talent development* (pp. 3-29). Unionville, NY: Trillium Press.

Eccles, J., Jacobs, J.E. & Harold, R.D. (1990). Gender role stereotypes, expectancy effects, and parents' socialization of gender differences. *Journal of Social Issues, 46*, 2, 183-201.

Eccles, J. S., & Lord, S. (1991). *The impact of school grade structure on early adolescents' school-related outcomes*. Technical report. Washington, DC: Government Office of Educational Research.

Eccles, J. S., Wigfield, A., Harold, R. D., & Blumenfeld, P. (1993). Ontogeny of children's self-perceptions and subjective task values across activity domains during the early elementary school years. *Child Development, 64*, 830-847.

Eccles, J. S., Wigfield, A., & Schiefele, U. (1998). Motivation to succeed. In W. Damon and N. Eisenberg (Eds.), *Handbook of Child Psychology, 3*, 1017-1095.

Egan, S.K. & Perry, D.G. (2001). Gender identity: A multidimensional analysis with implications for psychosocial adjustment. *Developmental Psychology, 37*, 4, 451-463.

Elwood, J. and Murphy, P. (2002). Tests, tiers and achievement: gender and performance at 16 and 14 in England. *European Journal of Education*, *37*, 4, 395-416.

Equal Opportunities Commission (2001). *Equal pay Task Force: Just Pay.* Manchester.

Equal Opportunities Commission (2005). *Free to choose: Tackling gender barriers to better jobs.* Great Britain Summary Report – EOC's investigation into workplace segregation of women and men.

Equal Opportunities Commission (2006). *Dads and their Babies: a household analysis.* EOC Working Paper Series No. 44.

Etaugh, C. and Riley, S. (1983). Evaluating Competence of Women and Men: Effects of Marital and Parental Status and Occupational Sex-Typing. *Sex Roles, 9*, 943-52.

European Commission (2002). *European Commission Household Panel Survey 1994-2001.*

Eurostat (2005). *Reconciling work and family life in the EU25 in 2003.* Eurostat News Release, 49/2005.

Fagot, B. I., Rodgers, C. S., & Leinbach, M. D. (2000). Theories of gender socialization. In T. Eckes & H. M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 65-89). Mahwah, NJ: Lawrence Earlbaum Associates.

Fan, P.-L. & Marini, M.M. (2000). Influences on gender-role attitudes during the transition to adulthood. *Social Science Research, 29*, 258-283.

Farmer, H. S. (1995). *Gender differences in adolescent career exploration.* Washington, DC: Office of Educational Research and Improvement.

Fast, M. (2006*). Vaatimusten ristipaineessa: Nuoret koulutetut naiset ja kilpailuyhteiskunta* (Facing conflicting pressures: Young educated women and competition society). Tasa-arvoasiain neuvottelukunta. Helsinki.

Fazio, R.H. (1990). Multiple processes by which attitudes guide behaviour: The MODE model as an integrative framework. In M.P. Zanna (Ed.), *Advances in experimental psychology*, 23, 75-109. New York: Academic Press.

Fazio, R.H. & Olson, M.A. (2003). Implicit measures in social cognition: Their meaning and use. *Annual Review of Psychology, 54*, 297-327.

Fazio, R.H., Jackson, J.R., Dunton, B.C. & Williams, C.J. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: A bona fide pipeline? *Journal of Personality and Social Psychology, 69*, 1013-1027.

Fisher-Thompson, D. (1993). Adult toy purchases for children: Factors affecting sex-typed toy selection. *Journal of Applied Development Psychology, 14*, 385-406.

Fiske, S.T. & Cuddy, A.J. (2006). Stereotype content across cultures as a function of group status. In S. Guimond (Ed.), *Social Comparison and Social Psychology: Understanding cognition, intergroup relation and culture* (pp. 249-263). Cambridge, England: Cambridge University Press.

Fiske, S.T., Cuddy, A.J., Glick, P. & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology, 82*, 878-902.

Francis, B. (1998). *Power plays: Primary school children's constructions of gender, power and adult work*. Stoke-on-Trent: Trentham Books.

Franken, M. W. (1983). Sex role expectations in children's vocational aspirations and perceptions of occupations. *Psychology of Women Quarterly, 8*, 59-68.

Garrett, C. S., Ein, P. L., & Tremaine, L. (1977). The development of gender stereotyping of adult occupations in elementary school children. *Child Development, 48*, 507-512.

Gelman, S.A., Collman, P. & Maccoby, E.E. (1986). Inferring properties from categories versus inferring categories from properties: The case of gender. *Child Development, 57*, 396-404.

Gettys, L. D., & Cann, A. (1981). Children's perceptions of occupational sex stereotypes. *Sex Roles, 7,* 301-308.

Glass, J. (1992). Housewives and employed wives: Demographic and attitudinal change, 1972-1986. *Journal of Marriage and Family, 54*, 559-569.

Glick, P. & Fiske, S.T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology, 70*, 491-512.

Glick, P., & Fiske, S. T. (1999). The Ambivalence toward Men Inventory: Differentiating hostile and benevolent beliefs about men. *Psychology of Women Quarterly, 23*, 519-536.

Glick, P. & Fiske, S.T. (2001). An ambivalent alliance: Hostile and benevolent sexism as complementary justifications for gender inequality. *American Psychologist, 56*, 109-118.

Glick, P., Fiske, S.T., Mladinic, A., Saiz, J. Abrams, D., Masser, B. et al. (2000). Beyond prejudice as simple antipathy: Hostile and benevolent sexism across cultures. *Journal of Personality and Social Psychology, 79*, 763-775.

Glick, P., & Hilt, L. (2000). Combative children to ambivalent adults: The development of gender prejudice. In T. Eckes & H. M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 243-272). Mahwah, NJ: Erlbaum.

Glick, P., Lameiras, M., Fiske, S.T., Eckes, T. Masser, B., Volpato, C., et al. (2004). Bad but bold: Ambivalent attitudes toward men predict gender inequality in 16 nations. *Journal of Personality and Social Psychology, 86*, 713-728.

Goodwin.S.A. & Fiske, S.T. (2001). Power and gender: The double-edged sword of ambivalence. Unger, R.K. (Ed.), *Handbook of the Psychology of Women and Gender*. New York: Wiley.

Goodwin, S.A., Operario, D. & Fiske, S.T. (1998). Situational power and interpersonal dominance facilitate bias and inequality. *Journal of Social Issues, 54*, 677-698.

Gottfredson, L. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology, 28*, 545-580.

Gottfredson, L. (1996). A theory of circumscription and compromise. In D. Brown & L. Brooks (Eds.), *Career choice and development: Applying contemporary theories to practice* (3rd ed.). San Francisco: Jossey-Bass.

Greenwald, A.G. & Banaji, M.R. (1995). Implicit social cognition: Attitudes, self-esteem and stereotypes. *Psychological Review, 102*, 1, 4-27.

Greenwald, A.G., McGhee, D.E. & Schwartz, J.L.K. (1998). Measuring individual differences in implicit cognition: The Implicit Association Test. *Journal of Personality and Social Psychology, 74*, 6, 1464-1480.

Greenwald, A.G., Nosek, B.A. & Banaji, M.R. (2003). Understanding and using the implicit association test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology, 85*, 2, 197-216.

Guimond, S., Chatard, A., Martinot, D., Crisp, R. J. & Redersdorff, S. (2006). Social comparison, self-stereotyping, and gender differences in self-construals. *Journal of Personality and Social Psychology, 90*, 221-242.

Guttmann, Allen. (1991) *Women's Sports: A History*. New York: Columbia University Press.

Hall, J.A. & Halberstadt, A.G. (1980). Masculinity and femininity in children: Development of the children's personal attribute questionnaire. *Developmental Psychology, 16*, 270-280.

Halpern, D.F. (1992). *Sex differences in cognitive abilities*. Hillsdale, NJ: Erlbaum.

Hannover & Kessels, U. (2004). Self-to-prototype matching as a strategy for making academic choices. Why German high school students do not like math and science. *Learning and Instruction,14*(1), 51-67.

Harkness, S. (2005). *Employment, Work Patterns and Unpaid Work: An Analysis of Trends Since the 1970s*. ESRC report.

Harris, R.J. & Firestone, J.M. (1998). Changes in predictors of gender role ideologies among women: A multivariate analysis. *Sex Roles, 38*, 239-252.

Heilman, M. (2001). Description and Prescription: How Gender Stereotypes Prevent Women's Ascent Up the Organizational Ladder. *Journal of Social Issues, 57*, 657-674.

Heilman, M. E., Block, C. J., Martell, R. R, & Simon, M. C. (1989). Has anything changed? Current characterizations of men, women, and managers. *Journal of Applied Psychology, 74*, 935-942.

Helwig, A. (1998). Gender-Role Stereotyping: Testing theory with alLongitudinal sample. *Sex Roles, 38*, 403-423.

Hemmer, J. D., & Kleiber, D. A. (1981). Tomboys and sissies: Androgynous children? *Sex Roles, 7*, 1205-1212.

Henderson, S., Hesketh, B., & Tuffin, K. (1988). A test of Gottfredson's theory of circumscription. *Journal of Vocational Behavior, 32*, 37-48.

Heyman, G.D. & Legare, C.H. (2004). Children's beliefs about gender differences in the academic and social domains. *Sex Roles, 50* (3 /4), 227-239.

Hill, A. (2005). Five-year-olds to be given career advice. *The Observer*, October 2, 2005.

Hill, J.P. & Lynch, M.E. (1983). The intensification of gender-related role expectations during early adolescence. In J. Brooks-Gunn & A.C. Petersen (Eds.), *Girls at puberty: Biological and psychosocial perspectives* (pp. 201-228). New York: Plenum Press.

Hoffman, C. & Hurst, N. (1990). Gender stereotypes: Perception or rationalization? *Journal of Personality and Social Psychology, 58*, 197-208.

Hofstede, G. (1972). *A comparison of four instruments to for measuring values.* Research Working Paper 1. Lausanne, Switzerland: IMEDE.

Hofstede, G. (2001). *Geert Hofstede Cultural Dimensions.* Retrieved on April 24, 2006, from http://www.geert-hofstede.com/.

Hogg, M.A. & Vaughan, G.M. (2002). *Social Psychology (3^{rd} ed.)* London: Prentice Hall.

Houston, D.M. & Marks, G. (2003) The Role of Planning and Workplace Support in Returning to Work after Maternity Leave. *British Journal of Industrial Relations*, *41*, 197-214.

Hudson, P. (2001). *Women's Work*. Retrieved of July 10, 2006 from http://www.bbc.co.uk/history/british/victorians/womens_work_01.shtml.

Huddy, L., Neely, F.K. & Lafay, M.R. (2000). Support for the women's movement. *Public Opinion Quarterly, 64*, 309-350.

Hughes, F.M. & Seta, C.E. (2003). Gender stereotypes: children's perceptions of future compensatory behavior following violations of gender roles. *Sex Roles, 49*, 11/12, 685-691.

Huston, A.C. (1983). Sex-typing. In E.M. Hetherington (Ed.), *Handbook of child psychology: Socialization, personality, and social development* (Vol. 4, pp. 388-467). New York: Wiley.

Huston, A.C. (1985). The development of sex typing: Themes from recent research. *Development Review, 5*, 1-17.

Hyde, J.S. & Durik, A.M. (2001). Psychology of Women and Gender. In J.S. Halonen & S.F. Davis (Eds.), *The Many Faces of Psychological Research in the 21st Century*. The Society for the Teaching of Psychology.

Jackman, M.R. (1994). *The velvet glove: Paternalism and conflict in gender, class and race relations.* Berkeley, CA: university of California Press.

Johnston, K. E., Madole, K. L., Bittinger, K., & Smith, A. (2001). Developmental changes in infant's and toddlers attention to gender categories. *Merrill-Palmer Quarterly, 47*(4), 563-584.

Jones, A. (1993). Becoming a "girl": Post-structuralist suggestions for educational research. *Gender and Education, 5*, 2, 157-166.

Jost, J.T. & Banaji, M.R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *British Journal of Social Psychology, 33*, 1-27.

Jost, J.T., & Kay, A.C. (2005). Exposure to benevolent sexism and complementary gender stereotypes: Consequences for specific and diffuse forms of system justification. *Journal of Personality and Social Psychology, 88*, 498-509.

Jussim, L., Coleman, L. M., & Lerch, L. (1987). The nature of stereotypes: A comparison and integration of three theories. *Journal of Personality and Social Psychology, 52,* 536-546.

Kant, I. (1977) [1783]. *Prolegomena to Any Future Metaphysics.* Trans. by Paul Carus, revised by J.W. Ellington. Indianapolis: Hackett Publishing Company

Karpinski, A. & Hilton, J.L. (2001). Attitudes and the Implicit Association Test. *Journal of Personality and Social Psychology, 81*, 774-788.

Katz, P. A. (1986). Modification of children's gender-stereotyped behavior: General issues and research considerations. *Sex Roles, 14*, 591-602.

Katz, P. A. (1996). Raising feminists. *Psychology of Women Quarterly* 20 (3), 323-340.

Katz, P.A. & Ksansnak, K.R. (1994). Developmental aspects of gender role flexibility and traditionality in children's gender roles. *Genetic, Social, and General Psychology Monographs, 112* (1), 103-147.

Kaufman, G. & Uhlenberg, U. (2000). The Influence of Parenthood on Work Effort of Married Men and Women. *Social Forces 78* (3), 931-947.

Kawakami, K., & Dovidio, J.F. (2001). Implicit stereotyping: How reliable is it? *Personality and Social Psychology Bulletin*, 27, 212-225.

Kohlberg, L.A. (1966). A cognitive-developmental analysis of children's sex role concepts and attitudes. In E.E. Maccoby (Ed.), *The development of sex differences* (pp. 82-173). Stanford, CA: Stanford University Press.

Kohlberg, L.A. & Ullian, D.Z. (1974). Stages in the development of psychosexual concepts and attitudes. In R.C. Friedman, R.M. Richart & R.L. Varde Wiete (Eds.), *Sex differences in behaviour*. New York: Wiley.

Korpi, W. (2000). *Faces of Inequality: Gender, Class and Patterns of Inequalities in Different Types of Welfare States*. Luxemburg Income Study Working Paper No. 244.

Leahy, R.L. & Shirk, S.R. (1984). The development of classificatory skills and sex-trait stereotypes in young children. *Sex Roles, 10*, 281-292.

Leinbach, M.D. & Fagot, B.I. (1993). Acquisition of gender labelling: A test for toddlers. *Sex Roles, 15*, 655-666.

Levy, G.D. (1999). Gender-typed and non-gender-typed category awareness in toddlers. *Sex Roles, 41*, 851-873.

Levy, G. D., Sadovsky, A. L., & Troseth, G. L. (2000). Aspects of young children's perceptions of gender-typed occupations. *Sex Roles, 42*, 993-1006.

Liben, S.L. & Bigler, R.S. (2002). The developmental course of gender differentiation: Conceptualizing, measuring and evaluating constructs and pathways. *Monographs of the Society for Research in Child Development, 67*, 2.

Liben, L. S., & Signorella, M. L. (1987). *Children's gender schemata. New directions for child development.* San Francisco: Jossey-Bass.

Liben, L.S. & Signorella, M.L. (1993). Gender-schematic processing in children: The role of initial interpretations of stimuli. *Developmental Psychology, 29*, 141-149.

Lips, H.M. (2004). *Sex & Gender: An introduction*. McGraw-Hill.

Lockheed, M., & Klein, S. (1985). Sex equity in classroom organization and climate. In S. Klein (Ed.), *Handbook for achieving sex equity through education*. Baltimore, MD: John Hopkins University Press.

Loo, R., & Thorpe, K. (1998). Attitudes toward women's roles in society: A replication after 20 years. *Sex Roles, 39*, 903-912.

Lutz, S.E. & Ruble, D.N. (1995). Children and gender prejudice: Context, motivation, and the development of gender concepts. *Annals of Child Development, 10*, 131-166.

Lytton, H. and Romney, D.M. (1991). Parents' differential socialization of boys and girls: A meta-analysis. *Psychological Bulletin, 109*, 267-296.

Maccoby, E.E. and Jacklin, C.N. (1974). *The psychology of sex differences*. Stanford, CA: Stanford University Press.

Maccoby, E.E. & Jacklin, C.N. (1987). Gender segregation in childhood. In H. Reese (Ed.), *Advances in child development and behaviour* (Vol. 20, pp. 239-287). New York: Academic Press.

Mangan, L. (2006). Where can I find a wife like this? *G2 Magazine*, The Guardian, August 29, 2006.

Marsh, H. W., & Jackson, S. A. (1986). Multidimensional self-concepts, masculinity and femininity as a function of women's involvement in athletics. *Sex Roles, 15*, 391- 416.

Martin, C.L. (1987). A ratio measure of sex stereotyping. *Journal of Personality and Social Psychology, 52*, 489-499.

Martin, C.L. (1989). Children's use of gender-related information in making social judgments. *Developmental Psychology, 25*, 80-88.

Martin, C.L. (1991). The role of cognition in understanding gender effects. In H. Reese (Ed.), *Advances in child development and behavior* (Vol. 23, pp. 113-149). San Diego, CA: Academic Press.

Martin, C.L. (1993). New directions for investigating children's gender knowledge. *Developmental Review, 13*, 184-204.

Martin, C.L. (2000). Cognitive theories of gender development. In T. Eckes & H.M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 91-121). Mahwah, NJ: Erlbaum.

Martin, C.L., Eisenbud, L., & Rose, H, (1995). Children's gender-based reasoning about toys. *Child Development, 66*, 1453-1471.

Martin, C.L. & Halverson, C.F. (1981). A schematic processing model of sex typing and stereotyping in children. *Child Development, 52*, 563-574.

Martin, C.L. & Halverson, C.F. (1983). Gender constancy: A methodological and theoretical analysis. *Sex Roles, 9*, 775-790.

Martin, C.L. & Halverson, C.F. (1987). The roles of cognition in sex role acquisition. In D.B. Carter (Ed.), *Current conceptions of sex roles and sex typing: Theory and research* (pp. 123-137). New York: Praeger.

Mason, K.O., Czajka, J.L. & Arber, S. (1976). Change in US women's sex-role attitudes, 1964-1974. *American Sociological Review, 41*, 573-596.

Mason, K.O. & Lu, Y.-H. (1988). Attitudes towards women's familial roles: Changes in the United States, 1977-1985. *Gender and Society, 2*, 39-57.

Massengill, D. & Di Marco, N. (1979). Sex-role stereotypes and requisite management characteristics: a current replication. *Sex Roles*, *5*, 561-570.

Masser, B. (1998). *The Ambivalent Sexism Inventory: A Social Psychological Evaluation*. Unpublished Doctoral thesis. University of Kent.

McConnell, A.R. & Leibold, J.M. (2001). Relations among the Implicit Association Test, discriminatory behaviour, and explicit measures of racial attitudes. *Journal of Experimental Social Psychology, 37*, 435-442.

Meehan, A. M., & Janik, L. M. (1990). Illusory correlation and the maintenance of sex role stereotypes in children. *Sex Roles, 22*, 83-95.

Milkie, M., Bianchi, S., Mattingly, B., & Robinson, J. (2002). Gendered division of childrearing. *Sex Roles*, *47*, 21- 40.

Miller, M. J., & Stanford, J. T. (1987). Early occupational restriction: An examination of elementary school children's expression of vocational preferences. *Journal of Employment Counseling, 24*, 115-121.

Miller, L., Pollard, E., Neathey, F., Hill, D. and Ritchie, H. (2005). *Gender segregation in apprenticeships*. Equal Opportunities Commission, WPS no. 25.

Millward, L., Houston, D., Brown, D. & Barrett, M. (2006). Young people's job perceptions and preferences. *Department of Trade and Industry*, March 2006.

Mischel, W. (1966). A social-learning view of sex differences in behaviour. In E.E. Maccoby (Ed.), *The development of sex differences* (pp. 57-81). Stanford, CA: Stanford University Press.

Moen, P., Erickson, M. A., & Dempster-McClain, D. (1997). Their mothers' daughters? The intergenerational transmission of gender attitudes in a world of changing roles. *Journal of Marriage and the Family, 59*, 281-293.

Murray, J. (2001). *20th Century Britain: The Woman's Hour*. Retrieved on July 8, 2006 from http://www.bbc.co.uk/history/british/modern/jmurray_01.shtml.

National Statitstics (2006). Labour Market Trends 2006. Retrieved on August 27, 2006, from http://www.statistics.gov.uk/downloads/theme_labour/LMT_Aug06.pdf.

Nosek, B.A. & Banaji, M.R. (2001). The go/no-go association task. *Social Cognition, 19*, 625-666.

Nosek, B.A., Greenwald, A.G. & Banaji, M.R. (2005). Understanding and using the implicit association test: II. Method variables and construct validity. *Personality and Social Psychology Bulletin, 31*, 2, 166-180.

Nykänen, A.S. (2003). *Women in Finland - Overview*. Retrieved on June 3, 2006, from 'Finnish Maiden' on http://www.suomi-neito.net/eneito.shtml.

Organization for Economic Cooperation and Development, (2005). *Babies and Bosses: Reconciling work and family life*. Volume 4 (Canada, Finland, Sweden and the United Kingdom). OECD Publishing.

O'Keefe, E.S. & Hyde, J.S. (1983). The development of occupational sex-role stereotypes: The effects of gender stability and age. *Sex Roles, 9*, 481-492.

Opetushallitus (2004). *Koulu – Sukupuoli – Oppimistulokset (School – Gender – Achievemnt)*. Helsinki.

Ormrod, J. (1999). *Human Learning*. Merrill: Columbus.

Owen Blakemore, J.E. (2003). Children's beliefs about violating gender norms: boys shouldn't look like girls, and girls shouldn't act like boys. *Sex Roles, 9-10*, 411-419.

Paechter, C. (1998). *Educating the Other: Gender, Power and Schooling*. The Falmer Press, London.

Parsons, T. & Bales, R. (1955). *Family, socialization and inter-action processes.* New York: Academic Press.

Powlishta, K. K. (1995). Gender bias in children’s perception of personality traits. *Sex Roles, 32* (1/2), 17-28.

Powlishta, K.K. (2000). The effect of target age on the activation of gender stereotypes. *Sex Roles, 42*, 271-282.

Powlishta, K.K. (2002). Measures and models of gender differentiation. *Monographs of the Society for Research in Child Development, 67,* 2, p.167-178.

Powlishta, K.K., Serbin, L.A., Doyle, A. & White, D.C. (1994). Gender, ethnic and body type biases: The generality of prejudice in children. *Developmental Psychology, 30* (4), 526-536.

Pylkkänen, E. & Smith, N. (2004). *Career Interruptions Due to Parental Leave - A Comparitive Study of Denmark and Sweden.* IZA Working Paper, 1050.

Reid, G. M. (1995). Children's occupational sex-role stereotyping in 1994. *Psychological Reports, 76*, 1155-1165.

Ridgeway, C.L. (2001). Gender, status and leadership. *Journal of Social Issues, 57*, 637-655.

Rubin, J. Z., Provenzano, F. J., & Luria, Z. (1974). The eye of the beholder: Parents’ views on sex of newborns. *American Journal of Orthopsychiatry, 44,* 512-519.

Ruble, D.N. & Martin, C.L. (1998). Gender Development. In W. Damon (Ed.), *Handbook of child psychology* (pp. 933-1016). New York: Wiley.

Ruble, D.N. & Stangor, C. (1986). Stalking the elusive schema: Insights from developmental and social-psychological analyses of gender schemas. *Social Cognitions, 4*, 227-261.

Rudman, L. A., Feinberg, J. M., & Fairchild, K. (2002). Minority members' implicit attitudes: Ingroup bias as a function of group status. *Social Cognition, 20,* 294-320.

Rudman, L. A., & Goodwin, S. A. (2004). Gender differences in automatic ingroup bias: Why do women like women more than men like men? *Journal of Personality and Social Psychology, 87*, 494-509.

Rudman, L.A., Greenwald, A.G. & McGhee, D.E. (2001). Implicit self-concept and evaluative implicit gender stereotypes: Self and ingroup share desirable traits. *Personality and Social Psychology Bulletin, 27*, 478-493.

Rudman, L. & Kilianski, S. (2000). Implicit and explicit attitudes toward female authority. *Personality and Social Psychology Bulletin, 26*, 1315-1328.

Rutland, A. (1999). The development of national prejudice, in-group favouritism and self-stereotypes in British children. *British Journal of Social Psychology, 38,* 55-70.

Räty, H., Vänskä, J., Kasanen, K. & Kärkkäinen, R. (2002). Parents' explanations of their child's performance in mathematics and reading: A replication and extension of Yee and Eccles. *Sex Roles, 46*, 115-122.

Sayers, J. (1984). Psychology and gender divisions. In Acker, S., Megarry, J., Nisbet, S. & Hoyle, E. (eds.), *World Yearbook of Education 1984: Women and Education*. London: Kogan Page.

Schein, V. E. (2001). A global look at psychological barriers to women's progress in management. *Journal of Social Issues, 57*, 675-688.

Sears, R.R., Maccoby, E.E. & Levin, H. (1957). Patterns of child rearing. Evanston, IL: Row, Peterson.

Seppälä, M. (1999). Tough Finnish Women: Statistics and myths. *Universitas Helsingiensis, 4.*

Serbin, L.A., Powlishta, K.K. & Gulko, J (1993). The development of sex-typing in middle childhood. *Monographs of the Society for Research in Child Development, 58.*

Serbin, L.A., Poulin-Dubois, D. & Eichstedt, J.A. (2002). Infants' responses to gender-inconsistent events. *Infancy, 3*(4), 531-542.

Shebloski, B. & Gibbons, J. (1998). Intergenerational Patterns in Beliefs About Women's Roles Among Adolescents in Singapore. *Cross-Cultural Resreach, 32*, 3, 257-278.

Sherman, P.J. & Spence, J.T. (1997). A comparison of two cohorts of college students in responses to the Male-Female Relations Questionnaire. *Psychology of Women Quarterly, 22*, 265-278.

Sidanius, J. & Pratto, F. (1999). *Social Dominance: An intergroup theory of social hierarchy and oppression.* New York: Cambridge University Press.

Sigel, R. S. (1996). *Ambition and accommodation: How women view gender relations.* Chicago: University of Chicago Press.

Sigelman, C. K., & Shaffer, D. R. (1995). *Life-span human development* (2nd ed.). Pacific Grove, CA: Brooks/Cole.

Signorella, M.L. (1987). Gender schemata: Individual differences and context effects: In L.S. Liben & M.L. Signorella (Eds.), *Children's gender schemata: New directions for child development* (Vol. 38, pp. 23-37). San Francisco: Jossey-Bass.

Signorella, M. L. (1992). Remembering gender-related information. *Sex Roles, 27*, 143-156.

Signorella, M.L. & Liben, L.S. (1985). Assessing children’s gender-stereotyped attitudes. *Psychological Documents, 15*, 7.

Signorella, M. L., Bigler, R. S., & Liben, L. S. (1993). Developmental differences in children's gender schemata about others: A meta-analytic review. *Developmental Review, 13*, 140-183.

Simmons, W. W. (2001). *When it comes to choosing a boss, Americans still prefer men.* Gallup Poll News Service. Retrieved August 18, 2005 from http://www.gallup.com/poll/releases/pr010111.asp.

Siltanen, J., J. Jarman and R.M. Blackburn. (1995). *Gender Inequality in the Labour Market, Occupational Concentration and Segregation.* Geneva: International Labour Office.

Silvern, L.E. & Katz, P.A. (1986). Gender roles and adjustment in elementary-school children: A multidimensional approach. *Sex Roles, 14,* 181-202.

Skelton, C., Hall, E. (2001). *The Development of Gender Roles in Young Children: A Review of Policy and Literature.* Manchester: Equal Opportunities Commission.

Smith, P.B. & Bond, M.H. (1999). *Social psychology across cultures.* New York: Allyn & Bacon.

Spence, J.T. & Helmreich, R.L. (1978). *Masculinity and femininity as personality dimensions.* Society for the Advancement of Social Psychology Newsletter 4.

Spence, J.T. & Buckner, C.E. (2000). Instrumental and expressive traits, trait stereotypes, and sexist attitudes. *Psychology of Women Quarterly, 24*, 44-62.

Spence, J.T. & Hahn, E.D. (1997). The Attitudes Toward Women Scale and attitude change in college students. *Psychology of Women Quarterly, 21*, 17-34.

Spence, J.T. & Helmreich, R.L. (1978). *Masculinity and femininity: Their psychological dimensions, correlates, and antecedents.* Austin: University of Texas Press.

Sperber, D. (1996) *Explaining Culture: a Naturalistic Approach.* Cambridge, MA: Blackwell.

Stangor, C. & McMillan, D. (1992). Memory for expectancy-congruent and expectancy-incongruent information: A review of the social and social developmental literatures. *Psychological Bulletin, 111,* 42-61.

Stangor, C. & Ruble, D.N. (1980). Differential influences of gender schemata and gender constancy on children's information processing and behaviour. *Social Cognition, 7*, 353-372.

Stewart, A. J. & Winter, D.G. (1977). Self-definition and social definition in women. *Journal of Personality, 42*. 238-259.

Stockard, J., & McGee, J. (1990). Children's occupational preferences: The influence of sex and perceptions of occupational characteristics. *Journal of Vocational Behavior, 36*, 287-303.

Stone, L. (1977). *The Family, Sex and Marriage in England 1500–1800.* London: Weidenfeld.

Strodtbeck, F. L., & Mann, R. D. (1956). Sex role differentiation in jury deliberations. *Sociometry, 19*, 3-11.

Subrahmanyam, K., Greenfield, P. M. Kraut, & Gross, E. (2001). The Impact of Computer Use on Children's Development. *Journal of Applied Developmental Psychology,* 22, 7-30.

Tajfel, H, (1981). *Human groups and social categories.* London: Cambridge University Press.

Tajfel, H. and Turner, J. (1979). An integrative theory of intergroup conflict. In W. Austin & S. Wochel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey, CA: Brooks / Cole.

Tajfel, H. and Turner, J. C. (1986). The social identity theory of inter-group behavior. In S. Worchel and L. W. Austin (eds.), *Psychology of Intergroup Relations.* Chigago: Nelson-Hall.

Taskinen, S. (2001). *The Situation of Families in Finland in 2001*. Retrieved on July 24, 2006 from http://www.oif.ac.at/archiv/pdf/gm_01_finland_taskinen _en.pdf.

The World Economic Forum (2005). *Women's Empowerment: Measuring the global gender gap.*

Thewlis, M., Miller, L. & Neathey, F. (2004). Advancing women in the workplace: Statistical Analyses. *EOC Working Paper Series no. 12.* Manchester: Equal Opportunities Commission.

Thorn, B. L. & Gilbert, L. A. (1998). Antecedents of work and family role expectations of college men. *Journal of Family Psychology. 12*, 259-267.

Thornton, A., Alwin, D.F. & Camburn, D. (1983). Causes and consequences of sex-role attitudes and attitude change. *American Sociological Review, 44*, 831-842.

Trice, A. D., Hughes, M. A., Odom, C., Woods, K., & McClellan, N. C. (1995). The origins of children's career aspirations: IV. Testing hypotheses from four theories. *The Career Development Quarterly, 43*, 307-322.

Turner, R. N., Hewstone, M., & Voci, A. (2006). Reducing explicit and implicit prejudice via direct and extended contact: The mediating role of self-disclosure and intergroup anxiety. Manuscript revised and resubmitted to *Journal of Personality and Social Psychology.*

Turner, P.J., Gervai, J. & Hinde, R.A. (1993). Gender-typing in young children: Preferences, behaviour and cultural differences. *British Journal of Developmental Psychology, 11*, 323-342.

Twenge, J. (1997). Changes in masculine and feminine traits over time: A meta-analysis. *Sex Roles, 36*, 305-325.

Twenge, J. (2001). Changes in women's assertiveness in response to status and roles: a cross-temporal meta-analysis, 1931-1993. *Journal of Personality and Social Psychology, 81*, 133-145.

Twomey B. (2002). Women in the labour market: results from the spring 2001 LFS. *Labour Market Trends*, March 2002.

Urberg, K.A. (1982). Sex role conceptualization in adolescents and adults. *Developmental Psychology, 15*, 90-92.

Veikkola, E.-S. (2002). Sukupuolten tasa-arvo tilastoissa. In A. Holli, T. Saarikoski, E. Sana (Eds.), *Tasa-arvo politiikan haasteet*, 50-69, WSOY.

Vogel, D.L., Wester, S.R., Heesacker, M., & Madon, S. (2003). Confirming sex stereotypes: A social role perspective. *Sex Roles: A Journal of Research, 48*, 519-528.

Whitelaw, S., Milosevic, L. & Daniels, S. (2000). Gender, Behaviour and Achievement: a preliminary study of pupil perceptions and attitudes. *Gender and Education, 12*, 1, 87-113.

Wigfield, A., & Eccles, J. S. (1994). Children's competence beliefs, achievement values, and general self-esteem: Change across elementary and middle school. *Journal of Early Adolescence, 14*, 107-138.

Williams, J.E., Bennett, S.M. & Best, D.L. (1975). Awareness and expression of sex stereotypes in young children. *Developmental Psychology, 11*, 635-642.

Williams, J.E. & Best, D.L. (1982). *Measuring sex stereotypes: A thirty-nation study. Beverly Hills*, CA: Sage.

Wilson, T.D., Lindsey, S. & Schooler, T.Y. (2000). A model of dual attitudes. *Psychological Review, 107*, 1, 101-126.

Women's International Centre (2005). *Women's History in America*. Retrived June 14, 2006, from http://www.wic.org/misc/history.htm.

Women and Work Commission (2006). *Shaping a fairer future*. DCLG publication centre.

Yee, M. & Brown, R. (1994). The development of gender differentiation in young children. *British Journal of Social Psychology, 33*, 183-196.

Yee, D. & Eccles, J. (1988). Parent Perceptions and Attributions for Children's Math Achievement. *Sex Roles, 19*, 5, 6, 317-333.

Zuo, J. (1997). The effect of men's breadwinner status on their changing gender beliefs. *Sex Roles, 37*, 799-816.

Appendix 1: English Questionnaire for Study 2

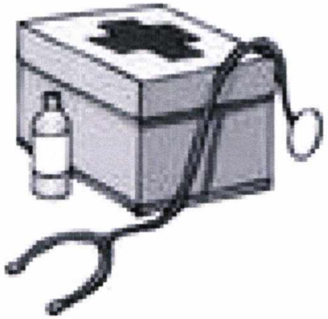
When I am an adult.....

SCHOOL: ______________________

AGE: _____ D.O.B.: ___________

SEX: GIRL BOY

NATIONALITY: ________________



This questionnaire asks you questions about the time when you will be an adult. Of course you can't be sure exactly what will happen, but we would like you to answer based on what you THINK will happen. There are also some questions about school, men and women. There are no right or wrong answers to any questions, just tell us what YOU THINK.

Who do you live with? (Please circle)

MUM DAD STEPMUM STEPDAD

Does your Mum have a job? **YES** **NO**

If yes, what does she do? ____

Does your Dad have a job? YES NO

If yes, what does he do? ____

Please think about your future, a time when you are an adult. Please read the following sentences and circle the answer that shows what you think will be true for you.

When I am a grown-up…

1. I will be married.	Definitely Not	Probably Not	Unsure	Probably Yes	Definitely Yes
2. I will have children.	Definitely Not	Probably Not	Unsure	Probably Yes	Definitely Yes
3. I will have a job.	Definitely Not	Probably Not	Unsure	Probably Yes	Definitely Yes
4. My job will be very important to me.	Definitely Not	Probably Not	Unsure	Probably Yes	Definitely Yes
5. I will earn a lot of money.	Definitely Not	Probably Not	Unsure	Probably Yes	Definitely Yes
6. I will be a good parent.	Definitely Not	Probably Not	Unsure	Probably Yes	Definitely Yes
7. I will be a good partner.	Definitely Not	Probably Not	Unsure	Probably Yes	Definitely Yes
8. It will be important to me to be married.	Definitely Not	Probably Not	Unsure	Probably Yes	Definitely Yes
9. It will be important to me to have children.	Definitely Not	Probably Not	Unsure	Probably Yes	Definitely Yes

If I have a family.... (Please circle)

My partner will do much more housework than me	My partner will do a bit more housework than me	My partner and I will do equal amounts of housework	I will do a bit more housework than my partner	I will do much more housework than my partner

If I have children... (Please circle)

My partner will look after our children much more than me	My partner will look after our children a bit more than me	My partner and I will look after our children equally	I will look after our children a bit more than my partner	I will look after our children much more than my partner

How good do you think you are at school? What about girls and boys in general?

1. In general, I'm good at school	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
2. I am good at literacy	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
3. I am good at science	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
4. I am good at maths	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
5. In general, girls are better at school than boys	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
6. In general, boys are better at school than girls	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
7. Boys are better at literacy than girls	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
8. Girls are better at literacy than boys	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
9. Girls are better at science than boys	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
10. Boys are better at science than girls	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
11. Boys are better at maths than girls	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
12. Girls are better at maths than boys	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree

In the boxes below are things that describe what people can be like. Please draw a line from boxes that you think describe **men better than women** to the picture of a man, and from the boxes that describe **women better than men** to the picture of a woman. If you think that some of the boxes describe **men and women equally well** please draw a line from them to the picture that shows both a man and a woman.

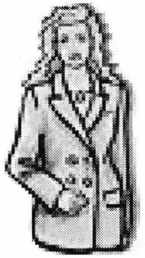
Can stand up for themselves

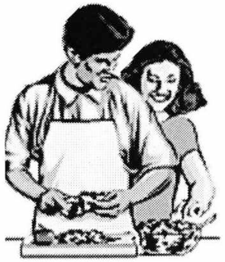
Unselfish

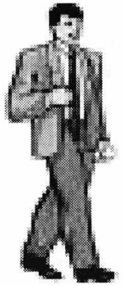
Loving

Brave

Doesn't give up easily







Understands others feelings

Gentle

Emotional

Confident

Polite

Leader-like

Wants to be the best at things

In the boxes below you can see a lot of different jobs. Please think which jobs you **COULD DO** when you are an adult. Try **NOT** to think which jobs you would or would not **WANT** to do. Please circle all the boxes with jobs you think you could do and cross over the boxes with jobs you think you couldn't do.

BUILDER
VET
PRIMARY TEACHER
MECHANIC
NURSE
SCIENTIST
LAWYER
DOCTOR
CLEANER
BEAUTICIAN
PRIME MINISTER
CHILDMINDER
ACTOR / ACTRESS
ACCOUNTANT
JOURNALIST
POLICE
SECRETARY
BUSINESS MAN / WOMAN

Which one of the jobs above would you most like to do when you are an adult? ____________________

Which one of the jobs above would you least like to do when you are an adult? ____________________

Are there any boxes with jobs that only women could do? If yes, which ones? ____________________

____

Are there any boxes with jobs that only men could do? If yes, which ones? ____________________

____

In the boxes you can see different things that need to be done in all families with children. Please mark each box with a letter that shows who does it in your family. For example...

- If your dad does most of the ironing, you would write F in the 'Ironing' box.
- If your grandmother normally cooks meals, you would write S in the 'Cooking meals' box.
- If you walk home from school on your own, you would write C in the 'Picking children up from school' box.

Playing with children ☐

Fixing things around the house ☐

Gardening ☐

Helping children with their homework ☐

Ironing ☐

Earning money ☐

Taking children to school

Laundry ☐

Cleaning the house ☐

MOSTLY MUM OR STEPMUM = M
MOSTLY DAD OR STEPDAD = F
MUM AND DAD ABOUT EQUALLY = B
MOSTLY CHILDREN / CHILDREN THEMSELVES = C
SOMEONE ELSE = S

Taking children to hobbies and friends' houses ☐

Doing dishes or loading and emptying the dishwasher ☐

Disciplining children when they are naughty ☐

Cooking meals ☐

Picking children up from school ☐

Explaining things to children ☐

Cleaning and fixing the car ☐

Putting children to bed ☐

Now we would like you to think what will happen when you are a parent, and have a family of your own. Please mark the boxes with a letter that shows who you think will do each of these things in your family.

- **If you think that you will do most of the gardening, you would write F in the 'Gardening' box if you're a boy, and M if you're a girl.**
- **If you think that you and your partner will do equal amounts of cleaning, you would write B in the 'Cleaning the house' box.**

Playing with children ☐

Fixing things around the house ☐

Gardening ☐

Helping children with their homework ☐

Ironing ☐

Earning money ☐

Taking children to school ☐

Laundry ☐

Cleaning the house ☐

MOSTLY MUM OR STEPMUM = M
MOSTLY DAD OR STEPDAD = F
MUM AND DAD ABOUT EQUALLY = B
MOSTLY CHILDREN / CHILDREN THEMSELVES = C
SOMEONE ELSE = S

Taking children to hobbies and friends' houses ☐

Doing dishes or loading and emptying the dishwasher ☐

Disciplining children when they are naughty ☐

Cooking meals ☐

Picking children up from school ☐

Explaining things to children ☐

Cleaning and fixing the car ☐

Putting children to bed ☐

Appendix 2: Items used in the English questionnaire for Study 3

Generally, what are men like?

	Not at all					Very much	
Confident	1	2	3	4	5	6	7
Ambitious	1	2	3	4	5	6	7
Caring	1	2	3	4	5	6	7
Unselfish	1	2	3	4	5	6	7
Kind	1	2	3	4	5	6	7
Determined	1	2	3	4	5	6	7
Competitive	1	2	3	4	5	6	7
Assertive	1	2	3	4	5	6	7
Emotional	1	2	3	4	5	6	7
Successful	1	2	3	4	5	6	7
Helpful	1	2	3	4	5	6	7
Loving	1	2	3	4	5	6	7

Generally, what are women like?

Caring	1	2	3	4	5	6	7
Successful	1	2	3	4	5	6	7
Determined	1	2	3	4	5	6	7
Assertive	1	2	3	4	5	6	7
Emotional	1	2	3	4	5	6	7
Unselfish	1	2	3	4	5	6	7
Helpful	1	2	3	4	5	6	7
Confident	1	2	3	4	5	6	7
Ambitious	1	2	3	4	5	6	7
Kind	1	2	3	4	5	6	7
Loving	1	2	3	4	5	6	7
Competitive	1	2	3	4	5	6	7

Role traditionalism scale (responded to on 1-7 Likert-type scale)

1. Men should have the main responsibility to earn money for their family
2. Men and women should be equally responsible for earning money for the family
3. Work is just as important for women than it is for men
4. Men and women should be equally responsible for looking after the home and children tend to share the responsibilities of earning and looking after the home and children
5. Work is more important for men than it is for women
6. There are some jobs that are suitable for men only
7. A woman can work in any occupation she chooses
8. There are some jobs that are suitable for women only
9. A man can work in any occupation he chooses
10. Women tend to be less ambitious than men
11. Men and women are equally ambitious
12. It is more important to men than to women to do well at work
13. Women are more caring and loving than are men
14. Men and women are equally caring and loving
15. Home and children are more important for women than they are for men.
16. Home and children are equally important for women and men

Generally, what are you like?

Caring	1	2	3	4	5	6	7
Successful	1	2	3	4	5	6	7
Determined	1	2	3	4	5	6	7
Assertive	1	2	3	4	5	6	7
Emotional	1	2	3	4	5	6	7
Unselfish	1	2	3	4	5	6	7
Helpful	1	2	3	4	5	6	7
Confident	1	2	3	4	5	6	7
Ambitious	1	2	3	4	5	6	7
Kind	1	2	3	4	5	6	7
Loving	1	2	3	4	5	6	7
Competitive	1	2	3	4	5	6	7

Ambivalent sexism scale for adolescents used in Studies 3 and 4 (responded to on 1-7 Likert-type scale)

Every man ought to have a woman he adores.

Women are too easily offended.

Women should be cherished and protected by men.

Most women are not grateful enough for all that men do for them.

When women loose to men in a fair competition, they often complain that they have been treated unfairly.

Women are more innocent and virtuous than men.

When a woman is in a relationship with a man, she tries to control him and tell him what to do.

In a big accident, women should be rescued before men.

Women often exaggerate problems they have.

A man can be completely happy even if he is not in love with a woman.

Many women don’t want to be just equal with men, but actually want to have more power than men do.

Women tend to have a better sense of right and wrong than men.

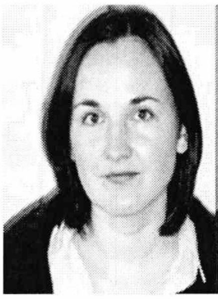
Appendix 3: The English questionnaire for Study 4 (ambivalent sexism scale was also included, see p. 345)

"Zelafeld" is a successful company that is currently looking for two new people to work for them. Please read the following job descriptions to find out what kind of people they are looking for:

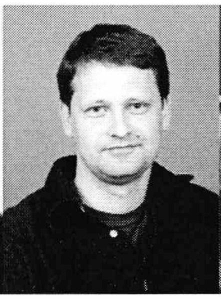
Administrative manager (Annual salary £30k)
The successful candidate will direct the work of large number of staff involved in management and personnel selection. Job responsibilities include budget preparation, management of staff and information systems.

Administrative assistant (Annual salary £15k)
The successful candidate will perform office functions including answering phones, using electronic mail, filing documents, maintaining calendars, making travel arrangements, and collecting and distributing mail.

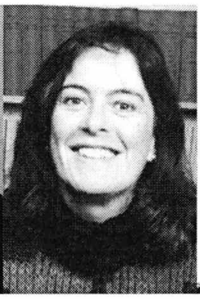
Three of the people pictured below have applied for the job as a manager, and the other three for the job as an assistant. All six are aged between 30 and 35. Look at the pictures, and think which three applied for the job as an assistant and which three for the job as a manager. Write either 'A' for assistant or 'M' for manager under each picture.



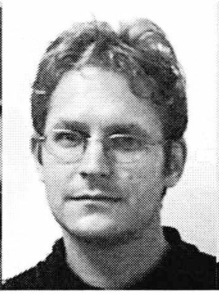
Alison ☐



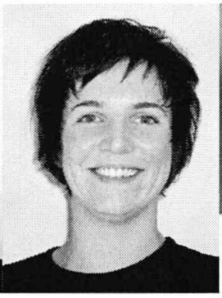
John ☐



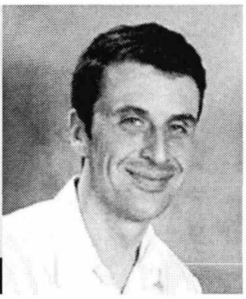
Susan ☐



Mark ☐



Julie ☐



David ☐

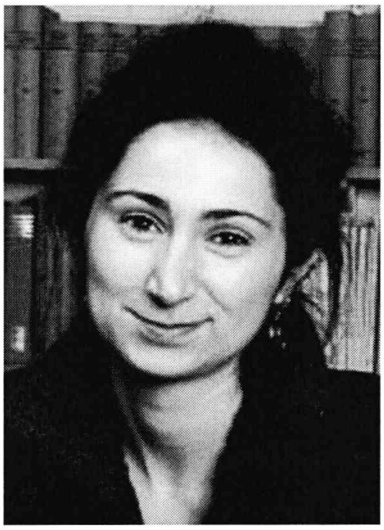
Who do you think the company will hire as an administrative manager?

Who do you think the company will hire as an administrative assistant?

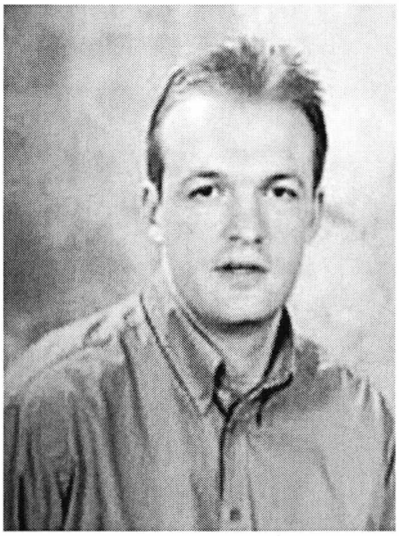
If you were the owner of the company, who would you hire as an administrative manager?

If you were the owner of the company, who would you hire as an administrative assistant?

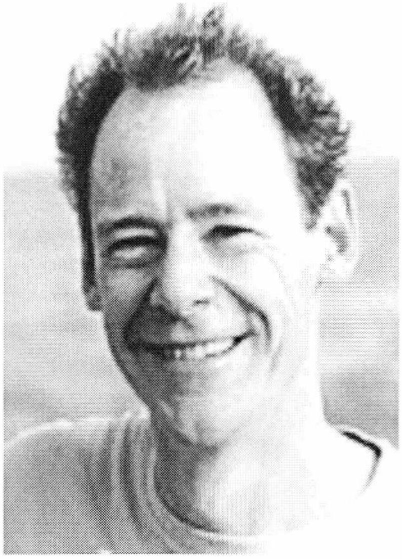
Here are pictures of people who already work as administrative managers or administrative assistants at Zelafeld. Both of the people in the top row are managers, and both of the people in the bottom row are assistants. Please think what kind of people they might be, and answer the questions about them on following pages.



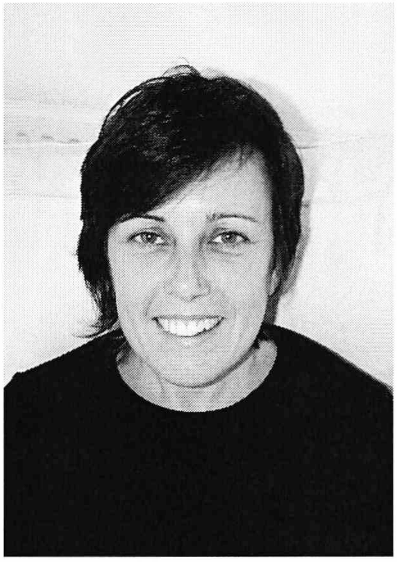
ADMINISTRATIVE MANAGER 1



ADMINISTRATIVE MANAGER 2

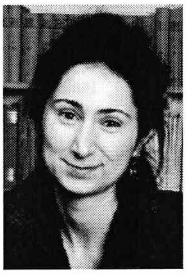


ADMINISTRATIVE ASSISTANT 1



ADMINISTRATIVE ASSISTANT 2

ADMINISTRATIVE MANAGER 1



What kind of a person you think she is?

Not at all competitive	1	2	3	4	5	6	7	Very competitive
Not at all helpful	1	2	3	4	5	6	7	Very helpful
Not at all assertive	1	2	3	4	5	6	7	Very assertive
Very unkind	1	2	3	4	5	6	7	Very kind
Not at all determined	1	2	3	4	5	6	7	Very determined
Not at all loving	1	2	3	4	5	6	7	Very loving
Very unconfident	1	2	3	4	5	6	7	Very confident
Not very caring	1	2	3	4	5	6	7	Very caring
Very unsuccessful	1	2	3	4	5	6	7	Very successful
Very selfish	1	2	3	4	5	6	7	Very unselfish
Not ambitious at all	1	2	3	4	5	6	7	Very ambitious
Not emotional at all	1	2	3	4	5	6	7	Very emotional

How successful is this person?

Not at all successful 1 2 3 4 5 6 7 Very successful

How good do you think she is at her job?

Not good at all 1 2 3 4 5 6 7 Very good

How much money do you think she earns?

Very little 1 2 3 4 5 6 7 A lot

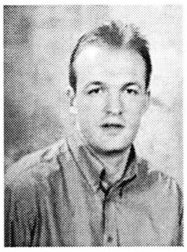
How much do you think she likes her job?

Very little 1 2 3 4 5 6 7 A lot

Do you think she is a typical woman?

Not typical at all 1 2 3 4 5 6 7 Very typical

ADMINISTRATIVE MANAGER 2



What kind of a person you think he is?

Not at all competitive	1	2	3	4	5	6	7	Very competitive
Not at all helpful	1	2	3	4	5	6	7	Very helpful
Not at all assertive	1	2	3	4	5	6	7	Very assertive
Very unkind	1	2	3	4	5	6	7	Very kind
Not at all determined	1	2	3	4	5	6	7	Very determined
Not at all loving	1	2	3	4	5	6	7	Very loving
Very unconfident	1	2	3	4	5	6	7	Very confident
Not at all caring	1	2	3	4	5	6	7	Very caring
Very unsuccessful	1	2	3	4	5	6	7	Very successful
Very selfish	1	2	3	4	5	6	7	Very unselfish
Not ambitious at all	1	2	3	4	5	6	7	Very ambitious
Not emotional at all	1	2	3	4	5	6	7	Very emotional

How successful is this person?

Not at all successful	1	2	3	4	5	6	7	Very successful

How good do you think he is at his job?

Not good at all	1	2	3	4	5	6	7	Very good

How much money do you think he earns?

Very little	1	2	3	4	5	6	7	A lot

How much do you think he likes his job?

Very little	1	2	3	4	5	6	7	A lot

Do you think he is a typical man?

Not typical at all	1	2	3	4	5	6	7	Very typical

ADMINISTRATIVE ASSISTANT 1

What kind of a person you think he is?

Not at all competitive	1	2	3	4	5	6	7	Very competitive
Not at all helpful	1	2	3	4	5	6	7	Very helpful
Not at all assertive	1	2	3	4	5	6	7	Very assertive
Very unkind	1	2	3	4	5	6	7	Very kind
Not at all determined	1	2	3	4	5	6	7	Very determined
Not at all loving	1	2	3	4	5	6	7	Very loving
Very unconfident	1	2	3	4	5	6	7	Very confident
Not at all caring	1	2	3	4	5	6	7	Very caring
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Very selfish	1	2	3	4	5	6	7	Very unselfish
Not ambitious at all	1	2	3	4	5	6	7	Very ambitious
Not emotional at all	1	2	3	4	5	6	7	Very emotional

How successful is this person?

Not at all successful 1 2 3 4 5 6 7 Very successful

How good do you think he is at his job?

Not good at all 1 2 3 4 5 6 7 Very good

How much money do you think he earns?

Very little 1 2 3 4 5 6 7 A lot

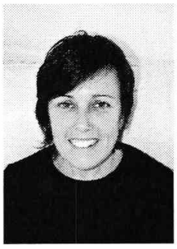
How much do you think he likes his job?

Very little 1 2 3 4 5 6 7 A lot

Do you think he is a typical man?

Not typical at all 1 2 3 4 5 6 7 Very typical

ADMINISTRATIVE ASSISTANT 2



What kind of a person you think she is?

Not at all competitive	1	2	3	4	5	6	7 Very competitive
Not at all helpful	1	2	3	4	5	6	7 Very helpful
Not at all assertive	1	2	3	4	5	6	7 Very assertive
Very unkind	1	2	3	4	5	6	7 Very kind
Not at all determined	1	2	3	4	5	6	7 Very determined
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Very unconfident	1	2	3	4	5	6	7 Very confident
Not at all caring	1	2	3	4	5	6	7 Very caring
Very unsuccessful	1	2	3	4	5	6	7 Very successful
Very selfish	1	2	3	4	5	6	7 Very unselfish
Not at all ambitious	1	2	3	4	5	6	7 Very ambitious
Not emotional at all	1	2	3	4	5	6	7 Very emotional

How successful is this person?

Not at all successful 1 2 3 4 5 6 7 Very successful

How good do you think she is at her job?

Not good at all 1 2 3 4 5 6 7 Very good

How much money do you think she earns?

Very little 1 2 3 4 5 6 7 A lot

How much do you think she likes her job?

Very little 1 2 3 4 5 6 7 A lot

Do you think she is a typical woman?

Not typical at all 1 2 3 4 5 6 7 Very typical

What kind of person are you?

Not at all competitive	1	2	3	4	5	6	7 Very competitive
Not at all helpful	1	2	3	4	5	6	7 Very helpful
Not at all assertive	1	2	3	4	5	6	7 Very assertive
Very unkind	1	2	3	4	5	6	7 Very kind
Not at all determined	1	2	3	4	5	6	7 Very determined
Not at all loving	1	2	3	4	5	6	7 Very loving
Very unconfident	1	2	3	4	5	6	7 Very confident
Not very caring	1	2	3	4	5	6	7 Very caring
Very unsuccessful	1	2	3	4	5	6	7 Very successful
Very selfish	1	2	3	4	5	6	7 Very unselfish
Not ambitious at all	1	2	3	4	5	6	7 Very ambitious
Not emotional at all	1	2	3	4	5	6	7 Very emotional

How successful do you think you will be when you are an adult?

Not successful at all	1	2	3	4	5	6	7	Very successful

How good do you think you will be at your job?

Not good at all	1	2	3	4	5	6	7	Very good

How much money do you think you will earn?

Very little	1	2	3	4	5	6	7	A lot

How much do you think you will like your job?

Very little	1	2	3	4	5	6	7	A lot

Appendix 4: The original ASI and AMI items (in English and *Finnish*)

Ambivalent Sexism Scale (Glick and Fiske, 1996)

Hostile sexism = H
Benevolent Sexism = B
B(P) – Protective Paternalism
B(I) – Heterosexual Intimacy
B(G) – Complementary Gender Differentiation
* Reverse scored item

No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman. B(I)

Aikaansaannoksistaan riippumatta mies tarvitsee naisen rakkautta ollakseen ihmisenä kokonainen.

Many women are actually seeking special favours, such as hiring policies that favour them over men, under the guise of asking for "equality." H

Vaatiessaan tasa-arvoa monet naiset itse asiassa hakevat erityisoikeuksia (esimerkiksi sukupuolikiintiöt).

In a disaster, women ought to be rescued before men. B(P)

Suuronnettomuudessa naiset tulisi pelastaa ennen miehiä.

Most women interpret innocent remarks or acts as being sexist. H

Monet naiset tulkitsevat viattomat kommentit tai teot seksistisiksi.

Women are too easily offended. H

Naiset loukkaantuvat liian helposti.

People are not truly happy in life without being romantically involved with a member of the other sex. B(I)

Ihmiset eivät ole koskaan täysin onnellisia, jos eivät ole romanttisessa suhteessa vastakkaisen sukupuolen edustajan kanssa.

Feminists are not seeking for women to have more power than men. H*

Feministit eivat tahdo naisille enemmän valtaa kuin miehillä on.

Many women have a quality of purity that few men possess. B(G)

Naiset omaavat sellaista puhdasmielisyyttä, jota miehillä ei juurikaan ole.

Women should be cherished and protected by men. B(P)

Miesten tulisi huolehtia naisista ja suojella heitä.

Most women fail to appreciate fully all that men do for them. H

Suurin osa naisista ei anna tarpeeksi arvoa kaikelle sille, mitä miehet heidän hyväkseen tekevät.

Women seek to gain power by getting control over men. H

Naiset yrittävät saada valtaa itselleen pyrkimällä kontrolloimaan miehiä.

Every man ought to have a woman whom he adores. B(I)

Jokaisella miehellä pitäisi olla nainen, jota hän ihailee.

Men are complete without women. B(I)

Miehet eivat ole vaillinaisia ilman naisia.

Women exaggerate problems they have at work. H

Naiset usein liioittelevat ongelmia, joita he kohtaavat työpaikalla.

Once a woman gets a man to commit to her, she usually tries to put him on a tight leash. H

Saatuaan miehen vakavaan suhteeseen kanssaan, nainen yrittää yleensä pitää hänet tiukasti talustusnuorassa.

When women lose to men in a fair competition, they typically complain about being discriminated against. H

Kun naiset häviävät miehille reilussa kilvassa, heillä on tapana väittää, että heitä on syrjitty.

A good woman should be set on a pedestal by her man. B(P)

Jos miehellä on hyvä nainen, hänen pitäisi nostaa tämä jalustalle.

There are actually very few women who get a kick out of teasing men by seeming sexually available and then refusing male advances. H*

Ei ole monia naisia, ketka nauttivat miesten kiusoittelemisesta antamalla aihetta uskoa, että he ovat seksuaalisesti kiinnostuneita, mutta kuitenkin torjumalla miehen yritykset.

Women, compared to men, tend to have a superior moral sensibility. B(G)

Naisilla on usein miehiä parempi taju oikeasta ja väärästä.

Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives. B(P)

Miesten tulisi olla valmiita tinkimään omasta hyvinvoinnistaan voidakseen turvata hyvä elintaso naiselle.

Feminists are making entirely reasonable demands of men. H*

Feministit asettavat miehille taysin realistisia vaatimuksia.

Women, as compared to men, tend to have a more refined sense of culture and good taste. B(G)

Naisilla on usein miehiä hienostuneempi maku ja parempi ymmärrys kulttuurista.

Ambivalence towards Men (Glick and Fiske, 1999)

Hostility towards men = H
Benevolence towards men = B
B(M) – Maternalism
B(I) – Heterosexual Intimacy
B(G) – Complementary Gender Differentiation
* Reverse scored item

Even if both members of a couple work, the woman ought to be more attentive to taking her of her man at home. B(M)

Vaikka kumpikin puoliso kävisi töissä, naisen tulisi huolehtia miehestään enemmän kotona.

A man who is sexually attracted to a woman typically has no morals about doing whatever it takes to get her in bed. H

Mies, joka on seksuaalisesti kiinnostunut naisesta, tekee usein moraalittomasti mitä tahansa saadakseen hänet sänkyyn.

Men are less likely to fall apart in emergencies than women are. B(G)

Hätätilanteissa miehet eivät menetä hermojaan ja toimintakykyään yhtä helposti kuin naiset.

When men act to 'help' women, they are often trying to prove they are better than women. H

Kun miehet 'auttavat' naisia, he haluavat usein itseasissa osoittaa paremmuuttaan naisiin nähden.

Every woman needs a male partner who will cherish her. B(I)

Jokainen nainen tarvitsee häntä ihailevan miehen.

Men would be lost in this world if women weren't there to guide them. B(M)
Miehet olisivat aika hukassa elämässään, jos ei olisi naisia heitä ohjaamassa.

A woman will never be truly fulfilled in life if she doesn't have a committed, long-term relationship with a man. B(I)

Nainen ei ole koskaan täysin tyytyväinen, ellei hän ole sitoutuneessa ja pitkäaikaisessa suhteessa miehen kanssa.

Men act like babies when they are sick. H

Kun mies on sairas, hän käyttäytyy kuin lapsi.

Men will always fight to have greater control in society than women. H

Miehet tulevat aina taistelemaan säilyttääkseen naisia suuremman vallan yhteiskunnassa.

Men are mainly useful to provide financial security to women. B(M)

Miehet ovat hyödyllisimmillään taatessaan naisten taloudellisen turvan.

Even men who claim to be sensitive to women's rights really want a traditional relationship at home, with the woman performing most of the housekeeping and childcare. H

Nekin miehet, jotka väittävät uskovansa sukupuolten tasa-arvoon, haluavat silti kotona perinteisen asetelman, jossa nainen pääasiassa hoitaa kotityöt ja lapset.

Every woman ought to have a man she adores. B(I)

Jokaisella naisella tulisi olla mies jota hän ihailee.

Men are more willing to put themselves in danger to protect others. B(G)

Miehet ovat alttiimpia vaarantamaan itsensä muita suojellakseen.

Men usually try to dominate conversations when talking to women. H

Miehet yrittävät yleensä hallita keskustelua naisten kanssa puhuessaan.

Men pay lip service to equality, but can't handle it. H

Useimmat miehet sanovat uskovansa sukupuolten tasa-arvoon, mutta eivät käytännössä pysty hyväksymään naista tasa-arvoisena itsensä kanssa.

Women are incomplete without men. B(I)

Naiset ovat vaillinaisia ilman miehiä.

Most men are really like children. H

Loppujen lopuksi useimmat miehet ovat itseasiassa lasten kaltaisia.

Men are more willing to take risks than women. B(G)

Miehet ovat naisia halukkaampia ottamaan riskejä.

When in positions of power, men sexually harass women. H

Kun miehillä on valta-asema suhteessa naisiin, he yleensä tavalla tai toisella ahdistelevat näitä seksuaalisesti.

Women should take care of man at home, else he'd fall apart. B(M)

Naisten tulisi pitää huolta miehistään kotona, koska miehet eivät pärjäisi, jos joutuisivat itse huolehtimaan itsestään.

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