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The Role of Racial Stereotypes in the
Perception and Rating of Children's
Behaviour

Shabnam Naheed Khan

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Faculty of Social Sciences
Department of Psychology

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ABSTRACT

FACULTY OF SOCIAL SCIENCES

PSYCHOLOGY

Doctor of Philosophy

THE ROLE OF RACIAL STEREOTYPES IN THE PERCEPTION AND RATING
OF CHILDREN'S BEHAVIOUR

By Shabnam Naheed Khan

Asian children have been over-rated for exhibiting problem behaviours (Sonuga-Barke et al., 1993). The present thesis explored whether stereotypes played a role in this rating bias. Study One established that public stereotypes of Asian children identified by teachers confirmed previous research with Asians stereotyped more positively than white English children. Teachers also reported that all teachers endorsed ethnic stereotypes less than the general public. Study Two used stereotypes of Asian and white English children to investigate explicit and implicit stereotypes. White English university students reported positive explicit stereotypes of Asians, but latency tasks revealed negative implicit stereotypes of Asians. They also reported negative explicit stereotypes of white English people, and positive implicit stereotypes of white English people. Study Three showed that white English students did not explicitly stereotype Asian or white English children, but implicit findings replicated Study Two. Asian students did not explicitly stereotype, but showed negative implicit stereotypes toward Asians. Finally, the findings from Study Four replicated those of white English students in Study Three. Importantly, it was found that white English children's behaviours were biased by implicit positive stereotypes. It is argued that the Sonuga-Barke finding is more of an under-rating of white English children's behaviour. In addition, implicit evaluative stereotypes have been consistently found. The findings are discussed in relation to stereotype activation, prejudice, and practical implications.

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CHAPTER ONE

The Role of Stereotypes in the Perception of Behavioural Disorders

1.1 Chapter Overview

In this chapter, evidence suggesting that rates of behaviour disorder often vary as a function of social group will be reviewed. It is proposed that these differential rates of disorder do not necessarily reflect actual differences so much as perceived differences in symptom expression. It is argued that the perception of behaviour is influenced by various factors, but ethnicity is looked at in more depth. Specifically, there is evidence that ethnic biases may distort observers' subjective ratings of behaviour disorder. For example, Sonuga-Barke, Minocha, Sandberg and Taylor (1993) found that subjective reports of Asian children's behaviours (when compared to objective reports) were over-estimating the severity of hyperactivity symptoms. This thesis suggests that such discrepancies between perceived and objective behaviours are caused by ethnic stereotypes.

1.2 Introduction

The present research is inspired by a study by Sonuga-Barke, Minocha, Sandberg and Taylor (1993). In that study, teachers were asked to rate all the children in their class on the Rutter behaviour scale. This is a scale used to identify externalising behaviours, such as Attention Deficit Hyperactive Disorder (ADHD). The age, gender and ethnicity of each child were also reported. The researchers then matched a white British child with a South Asian child by age, gender and the teachers' Rutter scale score. Ten pairs of children were matched in this way. Each matched white British-Asian child pair then undertook some activities in their normal classroom environment while being observed by two trained observers. Each observer independently used an objective schedule to record each child's behaviour. It was found that the objective assessments of the Asian children's behaviours were rated

significantly lower than the white British counterpart's behaviour. In other words, teachers were over-estimating the severity of problem behaviour symptoms in Asian children. If an Asian child was subjectively rated by teachers as displaying similar problem behaviours to a white British child, objective criteria would find the Asian child as displaying much less problematic symptoms than the white British child. Sonuga-Barke et al. (1993) suggested that these findings indicate an over-rating bias in reports of Asian children's behaviour symptoms. In addition, the authors argue that this over-rating bias may not be seen because, subjectively, an Asian child's behaviour would be seen as equivalent to a white British child, but objectively, the Asian child exhibits lower levels of problematic symptoms. This phenomenon has been labelled the 'hidden bias' by Sonuga-Barke et al.

This thesis examines the way in which observers perceive and rate the behaviour of ethnically diverse people. It is proposed that ethnic stereotypes may be a factor that underlies the 'hidden bias' documented by Sonuga-Barke et al. The present research will explore the relationship between stereotyping and behaviour ratings in four empirical studies. The first three studies develop stereotype measures and establish the existence of explicit and implicit stereotypes. The final study investigates the ratings of ethnically diverse children in relation to identified stereotypes. The present chapter illustrates that ethnic bias is an issue in the rating of many clinical disorders and explains why stereotypes may play a role in the 'hidden bias' issue. Chapter Two will review changes and developments in how stereotypes have been defined through the years. Chapter Three will review the development of stereotype measures that has followed these developments in the definition of stereotypes.

1.3 Behaviour

It is commonly accepted that behaviour is culturally and historically determined. Therefore, at any one time, individuals from different social groups will display different characteristics in the same circumstances. Ethnicity is a factor that appears to influence behaviour. For example, White youths exhibit lower levels of depression than Mexican Americans (Weinberg & Emslie, 1987). Such cultural and ethnic

differences could reflect objective differences in the behaviour displayed by members of different social groups. However, it has also been largely accepted that the interpretation of displayed behaviour is actually based on previous experience and previously held ideas about different social groups caused by social interaction and media portrayal. These reported cultural and ethnic differences in behaviour could simply be reflecting subjective differences in the perception of behaviour as a result of the target's perceived group membership. This thesis will explore this latter possibility.

There are a number of factors that may affect (consciously or unconsciously) the way one perceives other people. But, are these judgements made independently of people's perceived group identity? This research will focus on the effect of ethnicity on person perception first by describing how ethnicity and culture might affect perception, then by providing evidence of perceptual bias and finally by exploring the causes of bias.

1.4 Culture Differences and Acceptable Behaviour

At a general level, behaviour is often judged against cultural standards or cultural norms. Benedict (1934a) suggested that each society identifies certain behaviours that are of value to it and socialises its members to behave accordingly. Those individuals who do not exhibit these behaviours are considered abnormal and deviant by the rules of that society. In this way, deviance is always related to cultural standards. As Benedict (1934b) noted, the form of suspiciousness typically displayed in a Melanesian culture, i.e. that they refuse to leave their cooking pots for fear of someone poisoning the food, is likely to be considered pathological by Western standards. Conversely, the Melanesian society regards helpfulness and kindness, traits considered positive in the Western world, as abnormal. Thus, cultural standards are applied to various members of the society, young or old, male or female.

With respect to children, these standards influence expectations, judgements and beliefs about the behaviour of the younger generation. As Weisz, Chaiyasit, Weiss,

Eastman and Jackson (1995) reported, American adolescents are expected to show less self-control and more defiance toward adults compared with Asian children. Hackett and Hackett (1993) further support this notion by demonstrating that behaviours that are encouraged as healthy self-assertion by a white British parent would appear worryingly aggressive to a Gujarati Indian parent. On the other hand, what in Western society might be considered over-controlled and a cause for concern, in the Far East, would be considered normal and healthy (Weisz et al., 1987).

Weisz et al. (1998) stated that culture might influence the degree to which childhood psychopathology is deemed serious. In their study, parents and teachers in America and Thailand read descriptions of childhood behaviour problems and then completed various rating scales. The Thai participants were significantly less worried than their American counterparts about the behaviours. Weisz et al. understood this as being a result of the Thai Buddhist teaching in which the behaviour is not a reflection of enduring personality. In another study, Weisz et al. (1995) found that Thai teachers rated Thai children's behaviours as more deviant than American teachers rated American children's behaviours. However, objective findings suggested the exact opposite, i.e. that the behaviours of Asian children were less deviant. Weisz et al. suggested that this discrepancy between subjective and objective ratings may be due to harsher and more demanding behaviour standards in Thai than American culture.

Culture also influences how dysfunction is explained. Stahl (1991) found that North African mothers of mentally retarded children living in Israel saw their child's disorder to be a result of spiritual causes, e.g. as a punishment from God, or because demons had entered the child's body. Consequently, the mothers relied on corresponding treatments, e.g. praying, or burning the child's hand to drive the demons out. Although bizarre by Western standards, the mothers' actions were consistent with the cultural beliefs of their native countries. In sum, Stahl's research emphasises that minority groups in a heterogeneous society may have unique beliefs and standards by which they explain or judge behaviour.

Evaluative judgements about the deviance or normality of behaviour also take into account what is expected in specific social settings. For example, a child running

around may be acceptable in the playground, but not in the classroom; shouting may be allowed in one's home, but not in a library. Individuals are thus expected to behave in certain settings to meet situational norms. If individuals do not achieve these, questions will be raised about their level of competence. To summarise, an individual's culture is likely to influence his or her behaviour. This cultural influence on behaviour can lead individuals from ethnic minority groups to behave in certain ways that are deemed inappropriate or deviant by the majority culture. For example, an Indian child who is considered well-mannered by Indian standards may be perceived as shy or timid by British standards.

1.5 Ethnicity and Rating Bias

The discrepancy between the culture of the majority community and the culture of the minority group can be seen as problematic when considering the identification of behaviour problems in minority and White ethnic groups. Dunn (1968) and Mercer (1973) were among the first to note that, in the US, Blacks were more likely than Whites to be diagnosed under categories of disability. The authors also noted that Asians and Hispanics were less likely than Whites to be so. According to Hunt and Marshall (1994), this trend has continued in the US in more recent times.

Unfortunately, most of the research available involves US populations. There is limited research on UK populations. However, the prevalence rates from the US appear comparable with the UK. From previous research, it appears that most studies focus on the prevalence of disruptive behaviours in West Indian children living in inner city areas. Therefore, much of the research reviewed in the next sections involves children from this background.

In the US, research has shown that minority children's disruptive behaviours are either proportionally over-rated (e.g. Afro-Caribbean children) or under-rated (e.g. Mexican children) by education professionals. Langsdorf, Anderson, Waechter, Magrigal and Juarez (1979) found that Afro-Caribbean students were proportionally over-identified for behaviour problems relative to white American peers (also see, Lambert, Sandoval, & Sassone, 1979; Costello & Janiszewski, 1990). Contrastingly, Mexican

American children were under-identified for the same types of symptoms (e.g Reid, Maag, Vasa, & Wright, 1994).

In the UK, Rutter, Yule, Berger, Yule, Morton and Bagley (1974) studied behavioural deviance in native British and West Indian children. They found that over 40 percent of the West Indian, compared to 20 percent of the British children, were rated as deviant by their primary school teachers. This pattern, however, was specific to the teachers – West Indian parents disagreed with the teachers' reports of their child's behaviour. Cochrane (1979) compared teachers' rates of child behaviour disturbances using the Rutter scale and found that there were lower rates of disorder in two of the Asian groups (Indian and Pakistani children) compared to West Indian and British children. Kallerackal and Herbert (1974) also found lower rates of disturbance in Indian children according to parent and teacher accounts, relative to British children. Hackett, Hackett and Taylor (1991) have provided more recent support of this as they found less disturbance in a sample of Gujarati children when compared with British children. They suggested that the cultural expectation of obedience and intolerance to temper tantrums in Gujarati homes may protect children against behaviour disturbance.

Thus, in much the same way that West Indian children are proportionally over-identified for referral to clinical services, it has been found that Asian children are stated (i.e. officially reported as a 'problem') or excluded from schools much less frequently than their British counterparts. However, as suggested earlier, there may be a possibility that the culturally different expectations of the perceiver strongly affect these rates. Reid (1995) suggests that cross-cultural differences may not always reflect real differences in actual behaviours – they may instead reflect the perceptions of deviance on the part of the rater. That is, are the rates of identification of behaviour problems the result of *actual differences* in ethnic children's behaviour, or is it that the raters *think there is a difference* in ethnic children's behaviour when there is not? If the latter is true, then there is a serious issue concerning people's perceptions of behaviour that can potentially disadvantage minority children in an institutional and therefore subtle way.

In order to test this idea more rigorously, standardised research has been carried out. There is considerable evidence that suggests cultural differences do indeed contribute to inaccurate judgements of behaviour symptoms, i.e. that raters think there is a behaviour difference when there is not. For example, Shinn, Tindal and Spira (1987) explored gender and ethnic bias by comparing the reading performance of learning difficulties primary school children with that of non-learning difficulties primary school children. They found that teachers were accurate in identifying children with severe reading deficits, but they referred a significantly higher proportion of Black children than White children and males than females. The authors argue that racial and gender biases should not be discounted as important factors affecting teachers' referral decisions.

Zucker and Prieto (1983) have provided further evidence for the role of ethnic factors in creating inaccurate or biased judgements. The authors presented almost 300 special needs teachers with a written vignette about a child suspected of being mentally retarded. Despite IQ test results being equivalent and with only the target child's ethnicity varying, teachers rated the Hispanic students as being in greater need of special education placements than White students. There was no effect of gender on the ratings. In a similar study, this time using teachers from mainstream schools, Zucker, Prieto and Ruthersford (1979) found that again Hispanic students were deemed more in need of clinical placements than their White equivalents. Once more, gender did not influence teachers' ratings. Prieto and Zucker (1981) replicated their findings in a mixed ability school, using different fictional vignettes. The Hispanic boy depicted in the vignette was rated as significantly more in need of special education intervention than the White boy.

Bahr, Fuchs, Stecker and Fuchs (1991) conducted a multi-method, multi-source study to test for ethnic biased judgements in primary school teachers. Teachers were asked to select a child from their class who they thought was capable of achieving a pass grade, was also difficult to teach and was at risk of receiving clinical referral. By chance, half were Black and half were White. In an interview, individual teachers were asked for clinical information about the child's background and their reading achievement. Teachers were asked to give a verbal description of the child and to

complete standardised questionnaires. Classroom observations were also made. It was found that significantly larger numbers of Black target children were rated as being in need of referral by all teachers. Interestingly, the descriptions of the children and their behaviour scale ratings failed to distinguish the two ethnic groups. Despite these equivalences, the Black children were more likely to be referred.

More specifically in relation to externalising behaviours, Mann et al. (1992) asked mental health professionals from various countries to rate the behaviours of an 8-year old child, whose behaviours were presented on a video cassette. Indonesian and Chinese participants rated ADHD behaviours as being more severe than the American and Japanese participants. As the severity of behaviour was controlled for, these findings can be attributed to cross-cultural differences of perception.

As mentioned earlier, there are a number of authors (e.g. Shinn et al., 1987; Zucker & Prieto, 1983; Bahr et al., 1991) claiming differences in the expression of behaviour as exhibited by differing ethnic groups. However, only one paper to date has addressed the issue of rater bias, in convincing and systematic studies. Sonuga-Barke et al. (1993) found evidence for a systematic bias in teachers' reports of Asian children's ADHD behaviours in two separate experiments. Teachers' subjective ratings of childhood hyperactivity (as characterised by inattention, over-activity and impulsiveness) for the Asian and White pupils were compared to objective measures of hyperactivity. It was found that Asian children, who were rated by teachers as demonstrating equal levels of hyperactivity as the White children, were, in fact, significantly less active and inattentive both in standardised laboratory settings and in the classroom. In essence, teachers were consistently over-rating Asian children's behaviour for ADHD symptoms. Ethnic minorities constitute an increasingly large portion of the Western population and research on minority populations has convincingly demonstrated that there are interethnic differences in behaviour ratings. Research has also shown a bias in rater perception. Therefore, ethnicity has become an important issue in the identification and referral process of ethnic minority children with psychiatric problems.

The research reviewed thus far suggests that the relatively low prevalence rates of behaviour disorder among South Asian children may be artificially increased due to biased subjective ratings. This ‘hidden bias’ can disadvantage minority school children in Western society in an unwarranted way. The aim of the present research is to explore how and why the ethnicity of the child affects the perception of his or her behaviour. Specifically, the current research sets out to explore the possible mechanism that might lead to an over-rating bias of Asian children, as documented by Sonuga-Barke et al.

1.6 Why Might People’s Perceptions be Biased?

Sonuga-Barke and colleagues (1993) suggested a number of plausible, but unexamined explanations for the ‘hidden bias’. The objective measure in the Sonuga-Barke et al. research was used by trained observers. Of course, it is possible that the observers may have been underestimating the hyperactive behaviours expressed by the Asian children. However, both observers, of differing ethnicities, had high inter-rater reliability, implying consistency between their reports. On the other hand, in keeping with Reid (1995), the ‘hidden bias’ may have been due to the interpretation of the rating scale items (see Section 1.6.1 below) and not the perceptions of the raters themselves (see Section 1.6.2 below). In addition, ethnic stereotypes may have biased teachers’ subjective perceptions of South Asian children. The latter two ideas shall now be explored in greater depth.

1.6.1 Behavioural Rating Scales and the ‘Hidden Bias’

Interpretational issues contribute to the variance in rating scale scores, particularly when considering cross-cultural assessment. These interpretational issues can then result in the ‘hidden bias’ because the unit of measurement is not the same across raters or targets. Reid (1995) stated that validity and reliability in rating scales could be achieved if the scores on a given scale mean the same thing across different social groups, especially cultural groups. In other words, raters need to share a common understanding of the trait to be evaluated. For example, terms like ‘fidgety’ have

different connotations for culturally different people and as such, the ratings generated reflect different constructs across raters (Reid & Maag, 1994). For language differences, accurate translations may help, but this exercise can lead to denotative changes or misleading translations. Related to this, it is necessary for the raters to have a common understanding of the evaluative content of the trait. For example, Marsella and Kameoka (1989) reported that interpersonal dependency is viewed positively in Japan, but negatively in America. Therefore, comparisons of interpersonal dependency data from Japan and America will be difficult because the behaviour is not viewed in the same evaluative direction.

The reliability and validity of cross-cultural assessments can also be improved if there is a common competence in using the scale (Reid, 1995). Typically, rating scales are used to illustrate the degree of agreement to the scale item. This format may not be familiar to people in other countries and so the ability to use such measures should not be assumed (Marsella and Kameoka, 1989). Rating scales are also represented as descriptions of the intensity, frequency and duration of the target behaviour, e.g. 'not at all' or 'pretty much'. If raters differ on their definition of what denotes 'not at all', then a common metric is not shared creating problems with comparisons. Reid believes this is especially significant because ratings are based on a dimensional approach to disorder classification. Following this dimensional approach, an individual is only considered abnormal to the degree that he or she deviates from the group mean, a standard that may be implicitly used by the observer. Thus, cross-cultural differences may not reflect actual differences in behaviour but may instead reflect the perceptions of deviance on the observer's part. The following discussion focuses on this issue more.

1.6.2 Stereotypes and the 'Hidden Bias'

The possible impact of stereotypes that adults may hold about Asian culture/people could cause the 'hidden bias'. This explanation shall be the focus of this research and the basis on which the 'hidden bias' will be explored. Sonuga-Barke et al. suggested that teachers may set stricter standards when assessing Asian children's behaviour

over British children's behaviour and that a lower threshold for hyperactive behaviours would allow a higher rating of hyperactivity for an Asian child than an British child displaying the same behaviours. The authors proposed that these findings might be based on different standards of deviance. That is, ratings of deviance are made with reference to the distribution of deviance in the culture in question.

A number of researchers have found that South Asian culture values obedience and attentive behaviours to elders (Hackett, Hackett, & Taylor, 1993), conformity, kindness, honesty, religiosity, traditionality and conservatism (Eagly & Kite, 1987). In addition, Tong (1983) reported that stereotypes about Asian people include being timid, well-mannered and passive. With respect to academic ability, Asians have been stereotyped as hardworking (Aguilar, 1999) and excelling in many academic subjects, especially mathematics (Aronson et al., 1999). Taylor (1986) argues that South Asian children are reared in a 'low hyperactivity' culture and white British children are reared in a 'high hyperactivity' culture. As Guichard and Connolly (1977) summarised, the stereotypes about South Asian people are generally positive. People can generally hold such ideas about South Asian people in Western society and these thoughts are activated when they come into contact with South Asian people. If this is true, then general beliefs should be activated when a South Asian child is presented. Thus, assuming Taylor's viewpoint of 'low hyperactivity Asian' culture and 'high hyperactivity British culture, different cut-off points would implicitly be applied when teachers were asked to rate Asian and white British children's behaviours. Consequently, the extreme, say five percent, within each culture would be rated as hyperactive, irrespective of absolute levels of activity.

It is also possible that people implicitly use ethnic stereotypes when judging the behaviour of Asian and white British children. This idea is endorsed by the Shifting Standards theory of stereotyping (Biernat, Manis & Nelson, 1991). In this theory, the authors suggest that people would find it difficult to ignore a target's ethnic origin when appraising his or her behaviours. They would expect an Asian child to behave less 'hyperactively', based on the stereotypes they possess about the target group. Thus, with this lower minimum standard for Asian people's behaviour already set in

mind, if an Asian person behaves more hyperactively than is expected of him or her, he or she will be perceived as more hyperactive than they objectively are, possibly warranting clinical referral.

1.7 Aims of the Thesis

The aim of this thesis is to explore the possible role of ethnic stereotypes on ratings of behaviour of children from the South Asian minority group. That is, although prevalence rates of behaviour problems for South Asian children are generally lower than those of White or Black children, the 'hidden bias' found by Sonuga-Barke et al. (1993) indicates that rating bias may be hidden by lower prevalence rates for Asians. Sonuga-Barke et al. demonstrated a discrepancy between objective and subjective ratings of behaviour disorder among Asian and white British children. Objectively, Asian children were less hyperactive than white British children. Subjectively, teachers perceived Asian children to be as hyperactive as white British children. The present research aims to explore the links between stereotyping and the 'hidden bias'. It is the first time that these links have been investigated empirically. Although the final study of this thesis will directly examine this issue, the preliminary three studies will allow for the development of measures of stereotypes specifically for the target groups in question (i.e. Asian and white British people). The first three studies also aim to establish the content of the stereotypes people hold for the target groups in question.

1.8 Chapter Summary

This chapter asserts that a disproportionate number of children from minority ethnic communities is identified as displaying behaviour problems. Specifically, research suggests that South Asian children may be over-rated on behaviour rating scales (Sonuga-Barke et al., 1993). Although some papers have focused on the cause of biased ratings lying in the validity of behaviour scales, others have focused on subjective perceptions of raters. This thesis will adopt the latter perspective. It is suggested that the 'hidden bias' identified by Sonuga-Barke et al. may be caused by

the use of ethnic stereotypes. The thesis aims to explore the role of ethnic stereotypes in behaviour rating. The literature on stereotypes will be reviewed in the next two chapters.

CHAPTER TWO

Explicit and Implicit Stereotypes – A Historical Overview

2.1 Chapter Overview

This chapter outlines the development of ethnic stereotype research over the last few decades. Stereotypes will be defined and the two main theoretical perspectives on stereotype formation will be reviewed. These are the Sociocultural perspective and the Social cognitive perspective. Research into ethnic stereotypes from these two perspectives has been conducted using self-report measures, typically focusing on people's beliefs and feelings toward different racial groups. Self-report measures are based on the assumption that access to beliefs and feelings toward different racial groups is explicit, or conscious. However, in the last 30 years, research has demonstrated that peoples' self-reported beliefs and feelings toward different racial groups are rather poor predictors of their behaviour towards these groups. Thus, Social cognition stereotype research has started to explore unconscious processes where associations between social groups and their attributes are viewed as implicit, automatic and uncontrollable.

2.2 Introduction

Stereotypes (beliefs), prejudice (feelings) and discrimination (behaviours) are everyday terms often used to indicate biases in people's thoughts and actions relating to different social groups. It would therefore seem that each term bears a certain relationship with the others. Thus, when considering stereotypes, the implication is that they would have significant consequences for prejudice and discrimination toward social groups. It seems plausible that stereotypes, prejudice and discrimination are interrelated. For example, someone who has a negative stereotype of Asians may also be more likely to discriminate against Asians. However, not all researchers have agreed that beliefs, feelings and behaviour are interrelated. For example, Allport (1954) did not see the possession of stereotypes as a pre-requisite for the development

of prejudice or discrimination. Allport proposed that the roots of prejudice are much deeper than the mere possession and expression of stereotypes and that they are ingrained in human psyche. In a similar vein, Jost and Banaji (1994) believe that stereotypes are used to describe and justify a social group's existing condition or status. For example, Afro-Caribbean people have been stereotyped as lazy, possibly to provide a causal explanation for the group's lower economic status. In other words, stereotypes may be more a consequence than a cause of discrimination. In addition, as Brigham (1971a) found, there is no clear relationship between stereotypes and their utilisation in discriminatory behaviours. More recently, however, researchers have proposed that implicit cognitive processes may explain these links at an unconscious level (e.g. Banaji & Greenwald, 1994).

This present thesis, although indirectly examining this tripartite relationship between stereotypes, prejudice and discrimination, is more directly investigating whether ethnic stereotypes produce a conscious (i.e. explicit) or unconscious (i.e. implicit) bias in perceptions of minority children's behaviour. Therefore, the first step in exploring this issue is to review the concept of explicit stereotypes.

2.3 Conceptualisation of Stereotypes

Lippman (1922) introduced the term 'stereotype' to describe biased socially-derived perceptions that are set on a mental plate from which duplicate opinions can be made about people using certain criteria. In other words, stereotypes act as templates against which personal attributes are measured. Lippman's original definition implied that stereotypes are undesirable as they are produced by a faulty reasoning process which is based largely on incorrect information. His strongest criticism of stereotypes was that their content is rigid and resistant to education. Other researchers, such as Katz and Braly (1935) and Fishman (1956) supported this perspective. They also defined stereotypes as over-generalisations, albeit derived from irrational (not evidence-based) rather than incorrect (based in on incorrect information) thought processes. Campbell (1967) more specifically defined stereotypes as incorrect causal perceptions. According to Campbell, stereotypes reflect attributions relating to

unchangeable personal traits, such as race, as opposed to external causes.

Furthermore, Brown (1965) defined stereotypes as simply beliefs about what a target group possesses intrinsically and therefore they are unchangeable, psychological traits and qualities.

Brigham (1971b) reviewed the literature on stereotypes in order to identify the common element of the various stereotype definitions. He proposed that although stereotypes are generalisations about a group of people or members of a certain group, they are also considered unjust by observers if they reflect erroneous thought processes (e.g. Fishman, 1956), over-generalisations (e.g. Rokeach, 1968), factual incorrectness (e.g. Katz & Braly, 1935), extreme rigidity (e.g. Simpson & Yinger, 1969), or rationalisation for biased attitude or behaviour (Sagar & Schofield, 1980). Brigham's all-encompassing definition therefore focused on over-generalisations of an unjust and derogatory nature. More recently, Judd and Park (1993; Ryan, Park & Judd, 1996) added that a stereotype may be accurate in its estimate of central tendency (i.e. at the mean level of group trait expression), but it may be an inaccurate over-generalisation at an individual level, because within-group variability is overlooked. This is supported by Klineberg (1935) who views stereotypes as containing an element of truth about a member of a social group.

Social cognitive research has focused more on the role of stereotypes in information processing. In doing so, objective or external aspects are de-emphasised. This is certainly true for Hamilton and Troler (1986) who defined stereotypes as 'cognitive categories that are used by the social perceiver in processing information about people' (p.128). Thus, unlike Lippman, Hamilton and Troler do not necessarily view stereotypes as rigid, distorted or harmful (McCauley, Stitt & Segal, 1980). Similarly, some theorists have utilised other cognitive- and evaluative-neutral definitions of stereotypes. For example, Ashmore and Del Boca (1981) proposed that stereotypes are 'a set of beliefs about the personal attributes of a group of people' (p.16). This implies that stereotypes are beliefs about how the individual members of a group vary along a trait dimension. This definition therefore relies heavily on the descriptive content of stereotypes.

In sum, in the Social cognitive tradition, stereotypes are viewed as normal and necessary in order to process information, about people from various categories (Dovidio, Evans & Tyler, 1986; Sherman, Judd & Park, 1989). Yet, as Fiske (1987) warned, understanding stereotypes from a purely cognitive perspective may be inadequate because of the sheer complexities of the concept in relation to intention, motivation and behaviours.

2.3.1 Cognitive and Evaluative Content of Stereotypes

As suggested earlier, stereotypes are often conceived as *cognitive schemas* (Hamilton & Troler, 1986) where people of a given culture attribute characteristics to a social group (e.g. Karlins, Coffman & Walters, 1969) and perceive the members of the target group to possess certain traits (McCauley & Stitt, 1978). These group schemas may be spontaneously accessible and can affect how quickly information is encoded, stored and retrieved (Fiske & Taylor, 1991). In other words, the possession and activation of stereotypes produces an information processing advantage for those traits ascribed to social groups (Macrae, Stangor & Milne, 1994). Thus, in the tripartite model of stereotypes, prejudice and discrimination, stereotypes can be seen to represent the cognitive element of the model.

More recently, there has also been interest in the *evaluative content* of stereotypes, as well as the above-described cognitive aspect. That is, when stereotypes are activated, both cognitive and evaluative information becomes accessible (e.g. Fiske, 1982; Fiske & Pavelchak, 1986). Fiske and Taylor (1991) characterised this evaluative aspect to include emotions, moods and valence. Thus, where the cognitive component represents the semantic information about the trait (or trait associations), the evaluative component represents the evaluative information about the trait (the valence, positive or negative). Previously, the cognitive and evaluative responses were linked and not distinguished in the formation of stereotypes, yet they are now considered to be independently activated. As Dovidio and Gaertner (1993) have proposed, trait information about a group is independently represented twice in memory, once for descriptive information and again for evaluative information. This perspective of stereotypes clouds the originally clear distinction between stereotypes

(purely cognitive representations) and prejudice (evaluative representations) and accounts for two factors in the tripartite model. Some researchers (e.g. Eagly & Mladinic, 1989; Esses, Haddock & Zanna, 1993) have focused more on the evaluative nature of stereotypes. Others, such as Jussim, McCaulay and Lee (1995), proposed that stereotypes should be conceived as existing along two dimensions, accuracy (accurate vs. inaccurate) and valence (positive vs. negative). The authors suggest that most researchers focus on the inaccuracy/negativity stereotypes and that accurate/negative, accurate/positive and inaccurate/positive stereotypes are often neglected, despite their importance. However, Jussim et al. (1995) acknowledge that it is usually the inaccurate/negative stereotypes that cause bias in social perception and judgement.

The impact of regarding stereotypes as evaluative representations of social groups and their members are twofold. First, evaluative and cognitive measures may tap into two distinct aspects of stereotypes. This may cause these measures to be poorly associated. Stangor, Sullivan and Ford (1991) and Dovidio, Evans and Tyler (1986) have both found poor and non-significant correlations between cognitive and evaluative measures of stereotypes. Furthermore, by focusing only on the evaluative aspect of stereotypes, the distinction between operational and conceptual definitions of stereotypes need to be reformulated. It is important to maintain that stereotypes are multidimensional concepts. Therefore, the present thesis adopts a multidimensional viewpoint that a stereotype is a belief, be it positive or negative, about the traits, attributes and behaviours of members of a certain group of people. This definition assumes that beliefs about the characteristics of a group may be derived from accurate or inaccurate knowledge about the group on its own or in relation to another group. Stereotypes can also include cognitive and evaluative information.

2.4 Theoretical Perspectives on Stereotype Formation

Social psychologists are far from unanimous in their views about what stereotypes are. Hence, there is considerable disagreement about how best to develop a theoretical framework for and conduct research on stereotypes. Two dominant theoretical

perspectives on stereotype formation can be identified: Sociocultural and Social cognitive approaches (Ashmore & Del Boca, 1981).

2.4.1 Sociocultural Perspective

In this approach, stereotypes emanate from the sociocultural context in which people reside in order to help define the norms of the in-group. Biases are partly achieved by distinguishing and evaluating those characteristics that differ from in-group characteristics. These distinctions and evaluations of traits are dictated by those who are important in a society. That is, the Sociocultural approach considers the way through which social information is learned, transmitted (e.g. language, mass media) and changed via direct sources (parents, teachers, religious leaders, politicians etc.). Within this perspective, the same social biases can be represented across individuals and time. Pettigrew (1959) suggested that the more vigorously one adheres to societal norms, the more likely one is to evaluate out-group members negatively. Pettigrew suggested that this was the case only when societal norms prescribe out-group derogation. Stangor and Schaller (1996) stated that by examining the power of shared group stereotypes, one can determine how this affects peoples' behaviour. Once group biases exist in a culture, expected patterns of behaviour for those group members follow and these expectations determine the responses to target out-groups and the behaviour of the in-group members themselves.

The Sociocultural perspective is a 'top-down' approach in that the beliefs of a group begin to affect the behaviour of its individual members as they determine the social status of the target group. To think of an Afro-Caribbean person as 'lazy and stupid' can make stereotypes particularly problematic in that the perceiver will regard Afro-Caribbean people negatively because they possess inferior traits that are not admired by society, resulting in poor evaluations. An analysis of stereotype content is therefore fundamental to this approach. There is a high level of inconsistency among members of an in-group particularly as to the specific content of stereotypes about different out-groups. Katz and Braly (1933) found this to be the case with ethnic stereotypes, where less than 40 percent of the participants believed 'ignorant' and 'musical' described Afro-Caribbean people. Linville, Salovey and Fischer (1986)

believe that treating this inconsistency as a variable in itself can provide useful information about stereotyping processes. For example, if social information is determined according to the Sociocultural approach, individuals who communicate with members of their in-group more often (i.e. use language) will form stronger biases because their cognitions will be reinforced. The Sociocultural perspective then suggests that change in stereotype content can occur through indirect sources from which they are derived (e.g. education and other social institutions.)

2.4.1.1 Limitations of the Sociocultural Perspective

Although the Sociocultural view is valuable in that it recognises that individuals' beliefs are influenced by societal factors, weaknesses also exist with the approach. For instance, it has not yet been able to produce a unified theory. Therefore, the foundation is still disunited and consequently vague (Stangor & Schaller, 1996). This orientation also finds difficulty in providing evidence that social values and cultural norms are important determinants of stereotypes (Ashmore & Del Boca, 1981), nor does the research carried out from this perspective tell us much about how these cultural beliefs and evaluations are used by an individual. This is shown by the commonly-held assumption that stereotypes are translated from the culture to the individual via a simple translation process and that all members of a particular society acquire the same set of beliefs. Neither assumption holds in society (Jones, 1997). A further criticism is the use of individual-level measures of perceptual distortion and bias without specifying the underlying cognitive processes that produce the bias (Stangor & Schaller, 1996). These criticisms have led to the development of the Social cognitive framework outlined below.

2.4.2 Social Cognitive Perspective

When seen from the Social cognitive perspective, stereotypes are cognitive representations of social information about people and the groups from which they are seen to belong. This approach has emphasised that judgements depend on the group the target has been categorised under (Stangor, Lynch, Duan & Glass, 1992). A stereotype is then a cognitive structure that contains an individual's beliefs, knowledge and expectations about the social group of the individual. Over time,

people develop beliefs about the characteristics of the important social groups in their environment, beliefs that influence their responses and evaluations toward subsequently encountered individual members of those groups. Information received about social groups is interpreted, encoded in memory and subsequently retrieved for use in guiding responses.

Social cognitive researchers focus on the determinants of stereotypes in a 'bottom-up' fashion. That is, stereotypes are learned and potentially changed as a result of the information that individuals acquire through direct contact with members of other social groups. Of course, this information needs to be attended to (e.g. Langer & Imber, 1980), recollected (e.g. Fyock & Stangor, 1994) and integrated with other information (Schaller & O'Brien, 1992). Given this role of information in stereotype formation, information acquired as a result of direct contact with an out-group member would offer the best means of stereotype and attitude change (Hewstone & Brown, 1986), although indirect contact has not been ruled out as potentially valuable in this regard (Park & Hastie, 1987).

2.4.2.1 Mental Representation of Stereotypes

The group prototype model of stereotypes offers a comprehensive account of how stereotypes are represented in memory (e.g. Stangor & McMillan, 1992). This model talks about associations between group labels and the features that are assumed to be true for that group. In other words, the focus is on specific group labels (e.g. males, elderly, African etc.) and particular personal attributes (i.e. intelligent, aggressive etc.) Fazio and colleagues found that cognition that is based on either direct experience (Fazio, Chen, McDonel & Sherman, 1982) or have been expressed repeatedly (Powell & Fazio, 1984) was more predictive of behaviour because it was more accessible. That is, beliefs and attitudes that are more accessible (i.e. activated quickly) are presumed to be more powerful determinants of behaviour than those less accessible (or activated more slowly). This is because they are more likely to be activated upon exposure to a relevant cue or target object. Thus, accessibility is determined by the associative strength of an object-feature association which indicates the strength of the link between an object label and the judgements one has of that object label.

According to the group prototype model of stereotypes, stereotypes are not necessarily activated each time an individual is presented with an object for appraisal. Fazio (1995) proposed that stereotypes may not be activated when the connection between the object and its semantic or evaluative information is weak. The behaviour displayed will therefore be influenced by the nature of the association in memory – a strong connection between label and cognitive information will result in cognition-behaviour consistent expressions. Ashmore and DelBoca (1981) believe that a question, an image or a person can activate cognitive associations i.e. serve as a target object. It is necessary to be able to measure the associations an individual has made between category labels for social groups, such as Afro-Caribbean, women, homosexuals, or Jews and the semantic judgements that connect them in his or her memory.

2.4.2.2 Limitations of the Social Cognitive Perspective

Despite having the goal of being specific about how information is represented mentally, there is intrinsic ambiguity in the Social cognitive perspective. This suggests that perhaps more specificity does not provide a better understanding of stereotype formation. It is virtually impossible to distinguish representational formats at this specific level as some researchers have claimed (e.g. Barsalou, 1990), but it also may not matter from a practical point-of-view exactly how social information is stored. After all, the more important issues concern what conditions activate what social information and how and when this information affects behaviour. Stangor and Schaller (1996) believe that these more fundamental issues may be more effectively investigated via macroanalytic methods. Yet, despite the important contributions Social cognitive theorists have made toward understanding bias formation, there are concerns that this perspective may have overemphasised the role of individual perception and direct contact with individual members of a social group as determinants of stereotypes. As Hartley (1946) found, people can and do hold beliefs about social groups with whom they have had no direct contact. In addition, these cognitions may be well developed and rich. Hewstone and Brown (1986) have further criticised this viewpoint for basing its perspective on the assumption that stereotypes change following direct contact with members of other social groups. The authors found that direct contact had only small effects on cognition formation and content.

In summary, the two perspectives identify different levels of analysis that can be applied to the concept of stereotypes. Stereotypes can be described at the individual level (e.g. representation in *one's* mind) or at the consensual level (e.g. what a *group* of people believe and feel about themselves and others.) The Social cognitive perspective is useful in that it has provided a unifying theory of cognitive processes in terms of development and influence on others. This approach has also emphasised that possession of cognitive biases does not inevitably lead to the use of biased information. In essence, stereotypes may or may not be used as a basis for judgement as their use depends on the group the target has been categorised under (Stangor, Lynch, Duan & Glass, 1992), or the strength of association between the group label and traits (Fazio, 1995).

2.5 Stereotypes and Behaviour

Social scientists have been particularly concerned with the poor association between stereotypes and behaviour. Numerous studies have been conducted where the assessment of an object does not predict well the behaviour exhibited toward it. For example, attitudes toward minority group members have been reported as more positive than the behaviours toward minority group members might suggest (e.g. Gaertner & Dovidio, 1986; Monteith & Voils, 1998). Ethnic stereotypes have been the subject of social psychological research for a number of decades, with empirical work dating back as early as the 1930's (e.g. Katz & Braly, 1933). Early research often focused on beliefs toward social integration or desegregation, as well as social proximity (e.g. feelings about having a Black neighbour). Findings indicated negative beliefs about Afro-American people in the general population, but more specifically in White university samples (e.g. Dovidio & Gaertner, 1986). However, such negative or racist sentiments have been steadily decreasing, including negative stereotypical beliefs about Afro-Caribbean and other ethnic minority groups. For example, Judd et al (1994) found White participants did not feel that Afro-Americans adhered strongly to the stereotypes they personally endorsed about this social group. Whites also assigned a higher prevalence of positive attributes to Afro-Caribbean individuals than negative attributes.

Yet, despite this positive impression reported by participants on questionnaire studies, there appear to be large discrepancies between such reports and overt behaviours. In other words, people are reporting positive views about Afro-Caribbeans, but are still exhibiting negative discriminatory behaviours towards Afro-Caribbean targets. For example, despite reporting low levels of prejudice, participants judged an Afro-Caribbean person's behaviours as less competent than when the same behaviours were displayed by a White person (Biernat & Kobrynowicz, 1997). In addition, participants judged an Afro-Caribbean person's educational and employment potential less favourably than a similarly qualified White individual (Rosenthal & Berven, 1999), also despite reporting low levels of prejudice. Why do self-reports not predict behaviour? Are people deliberately editing their responses in order to portray themselves in a socially desirable manner? Or is their discriminatory behaviour perhaps guided by implicit or unconscious biases?

2.5.1 Social Desirability

Stereotypes have been assumed to operate and function in a conscious or explicit way. Therefore, explicit reports can be edited to reflect societal expectations more than personal judgement. In other words, there are social demand characteristics that often influence explicit measures. It is typical to hear an individual claim that they are not biased and that every human being should be judged on his or her own merits. Also, society often endorses the idea that the world should be colour-blind. These are certainly logical and sensible ideas that are difficult to argue against. Yet, it is now considered possible that these societal objectives have created some powerful dynamics that shape how individual members of the society should think and behave. These types of response have been labelled 'self-presentational' responses (Greenwald & Banaji, 1995). Self-presentational responses include responses where individuals are unaware of societal influence on their thoughts, feelings, or behaviour. As a result, responses unknowingly adhere more to overt societal opinion than true, personal opinion. Self-presentational responses could also include responses where individuals are aware of societal influence on their thoughts, feelings, or behaviour. As a result, responses are edited to adhere to those overt societal opinions than true, personal opinion. Finally, self-presentation responses could include responses that

adhere to societal opinion for the sake of their own self-concept, i.e. self-denial. In other words, a racist person might want to believe that he or she is non-racist to the point that non-racist views are reported, despite having racist private thoughts.

Recent research suggests that individuals may simply be unaware of their own application of stereotypes to certain groups. Banaji and Greenwald (1994) believe this to be the case because of the change in societal expressions of ethnic stereotypes. Where individuals once explicitly derogated different social groups (e.g. Blacks are bad), they no longer explicitly derogate different social groups for fear of societal disapproval. In other words, people no longer explicitly report their opinions about ethnic groups because society will label them a racist (McConahay, 1986). In short, Banaji and Greenwald believe that Western society, as a whole, views ethnic stereotypes as unacceptable. However, the authors believe that individuals still hold ethnic stereotypes. People do not overtly report their ethnic stereotypes because people do not want society to disapprove of them. Therefore, people explicitly report that they do not endorse ethnic stereotypes which is in line with societal opinion, despite holding contrary private beliefs.

2.5.2 Automatic Activation of Stereotypes

A further explanation for the low correlation between explicit stereotype reports and observed behaviours may be that behaviour is guided by implicit or unconscious biases. This perspective has been illustrated in memory research which is directly relevant to stereotype research. Information about social groups is stored in memory and the use of this information is based on accessing the memory store. In memory research, prior, ostensibly irrelevant, exposure to a list of words tends to be unknowingly recollected in a word completion task. That is, even though the participant is not instructed to recall the material presented to them earlier and is not thought to be able to do so, the responses indicate a residual effect (e.g. Roediger, 1990). Social researchers (e.g. Greenwald & Banaji, 1995) believe that group stereotypes may be activated spontaneously from memory, without the perceiver's intent and merely upon exposure to a relevant stimulus cue in the environment. This automatic activation occurs within a few milliseconds after exposure and requires few

cognitive resources (e.g. Shiffrin & Schneider, 1977). In general, the individual has only very limited control over the activation and often remains unaware of its existence or potential influences on subsequent behaviours.

Fazio (1986) proposed that the weak relation between cognition and behaviour may occur because only some beliefs, when stored in memory, were consistently related to behaviour. He further maintained that if the associative connection is strong, it is more likely that activation would spread from the cognitive representation of the object to that of its evaluation and the stronger the association the more passive and automatic the retrieval of such information will be. In other words, the more 'true' the belief, the more likely it would be to become active automatically whenever the target object is encountered in the environment. Consequently, the association will elicit a belief-consistent behaviour response. But, in the case of the weaker belief or attitude, the only opportunity for them to be activated while the target object was being encountered was if the individual consciously and intentionally thought about his or her attitude. Strong cognitions, therefore, should exert a more consistent 'on-line' influence on behaviour towards the attitude object than should weaker cognitions. In a series of different experiments that investigated this postulation, Fazio, Sanbonmatsu, Powell and Kardes (1986) demonstrated that automatic cognitions are activated upon merely observing an attitude object. It was from this work that the idea of implicit cognitions was born. Greenwald and Banaji (1995, p.8) defined implicit social cognition as 'introspectively unidentified (or inaccurately identified) traces of past experience that mediate favourable or unfavourable feeling, thought, or action toward social objects'. Following this definition, implicit racial stereotypes can be defined as unconscious beliefs toward people of different ethnic backgrounds.

Research by Banaji and Greenwald (e.g. 1994, Greenwald & Banaji, 1995) suggests that implicit stereotypes occur when individuals internalise social information within their cognitive representations of others. For example, men are assumed to be physically stronger than women, an assumption that leads individuals to make memory mistakes when simply attempting to recall the names of people who may or may not be physically strong. In this way, no conscious motivational bias is hypothesised – the process is automatic. Devine (1989) similarly notes that social

perceptions and impressions are heavily influenced by exposure to social stereotype information, despite the unavailability of that information for conscious manipulation. Both these viewpoints shift motivation from the individual to the unconscious cognitive processing that biases social information. Banaji and Greenwald (1994) have used the above evidence to argue that there is much to gain from focusing more on indirect, unconscious or implicit modes of stereotypes. They suggest that by relying on explicit references to target groups, the operation of subtle biases that influence everyday behaviour is overlooked. In other words, stereotypes are believed to be automatic to the individual which is why spontaneous or more automatic behaviour tends to be different from explicit reports of stereotype possession.

2.6 Interplay between Implicit and Explicit Stereotypes

It is the discrepancies that may arise between controlled responses toward a social group (i.e. one's explicit cognition) and the implicit influences of social knowledge (i.e. cognitive associations that come to mind spontaneously) that are of interest. As mentioned earlier, it may be caused by people's ability to effectively edit their responses on explicit measures, or because people are genuinely unaware of their beliefs. There is considerable debate emerging about how implicit measures relate to the more traditional explicit measures. A number of studies indicate that individual differences in spontaneous measures are unrelated to differences in explicit measures (e.g. Banaji & Hardin, 1996; Devine, 1989; Fazio, Jackson, Dunton & Williams, 1995; Greenwald, McGhee & Schwartz, 1998). In contrast, some studies have found moderately strong relationships between the two constructs (e.g. Kawakami, Dion & Dovidio, 1998; Lepore & Brown, 1997; Wittenbrink, Judd & Park, 1997).

One obvious explanation for the discrepancy between implicit and explicit measures is the limited validity of explicit self-report measures. This is thought to be due primarily to their sensitivity to social desirability forces, as well as to contextual factors such as question order and wording (e.g. Sudman, Bradburn & Schwarz, 1996). In other words, explicit self-reports undoubtedly have their weaknesses. However, an alternative explanation for this discrepancy may be that the automatic

assessments have themselves measured different constructs. Wittenbrink, Judd and Park (2001) found that cognitive and evaluative tasks do in fact tap into different memory schemas, which can result in the poor observed correlations between implicit and explicit measures if the same memory content is not assessed by both measures.

2.7 How Might Stereotypes Play a Role in the 'Hidden Bias' Phenomenon?

The aim of this thesis is to explore the possible role of stereotypes on perception of behaviour of children from the South Asian minority group. There are a number of papers that indicate that South Asian culture values obedience and to be attentive to elders (Hackett, Hackett & Taylor, 1993), conformity, kindness, honesty, religiosity, traditionality and conservatism (Eagly & Kite, 1987). In addition, Tong (1983) reported that stereotypes about Asian people include being timid, well-mannered and passive. With respect to academic ability, Asians have been stereotyped as hardworking (Aguilar, 1999) and excelling in many academic subjects, especially mathematics (Aronson et al., 1999). Taylor (1986) argues that South Asian children are reared in a 'low hyperactive' culture and White British children are reared in a 'high hyperactive' culture. As Guichard and Connolly (1977) summarised, the stereotypes about South Asian people are generally positive. People can generally hold such ideas about South Asian people in Western society and these thoughts are activated when they come into contact with South Asian people. If this is true, the general beliefs should be activated when a South Asian person is presented. How stereotypes are then used can be seen to correspond with the Shifting Standards theory. People would expect an Asian child to behave less 'hyperactively', based on the stereotypes they possess about the target group. Thus, with this lower minimum standard for Asian people's behaviour already set in mind, if an Asian person behaves more hyperactively than is expected of him or her, he or she will be perceived as more hyperactive than they objectively are.

2.8 Chapter Summary

Racial stereotype research has been reviewed. This review indicates that stereotypes were initially viewed as explicit, but more recently are viewed as implicit, or automatic. This change in stereotype research was prompted by a change in societal opinion to be less openly racist. People are therefore less likely to overtly admit to possessing negative beliefs about minorities, despite privately holding negative beliefs about minorities. In addition, Fazio believed that the links between social groups and their attributes are more unconscious, despite what people openly express. Therefore, behaviour is more strongly guided by these automatic stereotypes. As expected, along with this change in stereotype development has come a change in methodology. Where explicit measures focus on self-report questionnaires, implicit measures employ reaction time tasks. The next chapter will outline the methodological advances in stereotype research.

CHAPTER THREE

Explicit and Implicit Stereotype Methodology – A Historical Overview

3.1 Chapter Overview

This thesis explores the link between ratings of children's behaviour and ethnic stereotyping. Chapter Two reviewed the conceptual developments in the stereotype literature which were prompted by changes in societal views toward more egalitarian and humanitarian thinking. This change in emphasis has shifted the theoretical perspective on stereotypes. Stereotypes are now seen to operate on both an explicit level, as well as a more subtle and implicit, or unconscious, level. This shift in emphasis has prompted the revision of social cognition methodology in a similar direction, i.e. from explicit to implicit measures. The present chapter will plot the historical development of stereotype methodology, starting with the explicit measures of stereotypes to more unobtrusive methods and then finally to the use of reaction time (RT) tasks to explore the activation of implicit stereotypes.

3.2 Introduction

Over the years, stereotypes have been measured in a number of ways, typically focusing on the extent to which Whites have negative biases toward Blacks. The importance of stereotype measurement resides in the basic premise that stereotypes can predict behaviour. In Chapter Two, earlier work in stereotype research assumed that stereotypes operate at a conscious level. For example, if an individual reports negative feelings toward a racial group, one can infer, with a degree of certainty, that this person is also likely to behave negatively toward a member of that group. More contemporary perspectives saw this link between beliefs and behaviour as more complex than the above example suggests. Some studies (e.g. LaPiere, 1934; Devine, 1989) have shown inconsistencies between reported stereotypes and behaviours. These inconsistencies may have been caused by societal changes toward a more

egalitarian treatment of people of different ethnicities. This present chapter aims to review how methods in stereotype research have developed alongside the conceptual shift from explicit to implicit stereotypes mentioned in Chapter Two.

3.3 Explicit Measures of Stereotypes

3.3.1 Methodologies within the Sociocultural Perspective

As described earlier, a stereotype seen from the Sociocultural perspective is consensually-derived. Individuals learn the norms of their society, including those out-group characteristics that differ from in-group characteristics. The following section will describe the more common measures within this Sociocultural orientation.

Checklist Approach. Katz and Braly (1933) conducted a classic study that is often referred to as the first attempt to measure stereotypes. Katz and Braly listed 84 diverse characteristics and asked 100 male university students to select those traits they believed were most characteristic of ten ethnically diverse groups: White Americans, Chinese, English, Germans, Irish, Italians, Japanese, Jews, Blacks and Turks. The stereotypes that emerged included white Americans as intelligent and materialistic, Blacks as lazy, superstitious and musical and Jews as stingy. It was concluded from this study that the high degree of agreement in stereotypes indicated support for the existence of a cultural force that has moulded the public's belief. In 1935, Katz and Braly replicated their study. After students were asked to identify the traits that commonly described the ten ethnic and national groups, their personal opinions of the same group were sought in a similar way. Not only did the findings mimic the 1933 study, there were virtually no differences in the assignment of traits as a function of instructions. For Katz and Braly, a stereotype was a set of traits that were thought to characterise some groups more than other groups. A stereotype was identified and formulated simply by listing those adjectives most frequently identified by the participants (in Katz and Braly's case, white American males).

However, the validity of such an approach can be criticised for several reasons. First, the generalisability of such stereotypes is limited to the group of people that have identified them. Second, the researchers chose the 84 traits and did not allow the participants to generate their own lists. It is therefore unclear that these traits are indeed ones that the participants would have otherwise chosen. In essence, the participants are asked to choose from a limited set of adjectives that may not accurately represent their own thoughts and beliefs in the first place, thus possibly creating forced, false and inaccurate choices. Finally, participants may have only reported their agreement that a stereotype existed, not their agreement that the trait was stereotypical of the target group in question. Despite the limitations of the Katz and Braly approach to stereotype measurement, their method continued to be used for at least three and a half decades.

Free Response Method. Devine (1989) was interested in the content of stereotypes and wanted to understand people's knowledge of stereotypes, not their personal opinions or beliefs about what stereotypes are. Participants were given a free-response questionnaire. Their task was to generate what they thought were cultural stereotypes of Blacks i.e. their beliefs about cultural stereotypes of Black people. The responses were then categorised under 15 headings. The number of participants who thought of stereotypes under each category was represented as a percentage of the total number of participants. Participants were also given a prejudice measure (Modern Racism Scale [MRS], McConahay, 1986). Devine found that participants believed that stereotypes of Blacks included: poor, athletic, criminal, aggressive/tough, sexually perverse, low in intelligence and lazy. People who scored low on the prejudice measure did not identify different cultural stereotypes about Blacks as compared to the high prejudice participants. Thus, Devine's free-response measure seemed to reflect people's knowledge of stereotypes, irrespective of prejudice levels. Devine stated that the findings confirm the consensus idea that stereotypes are part of one's social heritage. She maintains that stereotypes cannot be escaped because they are essentially learnt through socialisation and are prevailing in society.

Proportion of the Group. Some researchers (e.g. Brigham, 1971b) tried to move on from the idea that stereotypes only exist as a consensually validated belief. In order to

move on, participants were asked to judge not simply whether a group possessed a trait or not, but what percentage of its members possessed that trait. McCauley and Stitt (1978) developed a measure to test exactly that. They called it the 'diagnostic ratio' (DR), where:

$$DR = \frac{P(\text{trait/ethnic group})}{P(\text{trait/total population})}$$

McCauley and Stitt applied the DR to the findings of Karlins, Coffman and Walters (1969). Karlins et al. found that stereotypes of Germans included: efficient, strict, extremely nationalistic, industrious and scientifically minded. McCauley and Stitt compared these five German stereotypes against five traits shown not to be stereotypes of Germans (ignorant, impulsive, pleasure-loving, superstitious and tradition-loving). They found that those stereotypic German traits identified by Karlins et al. also yielded high individual endorsement by participants according to the DR.

McCauley and Stitt tested the validity of the DR by asking participants from six different social groups to rate the proportion of all Americans and then of Afro-Americans who (a) complete secondary school, (b) have illegitimate children, (c) are unemployed, (d) are victims of violent crimes, (e) are on welfare, (f) have four or more children and (g) are female heads of the household. Thus, the DR would be the percentage of Afro-Americans thought to possess each trait divided by the percentage of all Americans thought to possess the trait. A neutral value of '1' would occur if the proportions were equal in their representation of the attribute in question; a value greater than '1' would occur if the trait was stereotypic of the group in question; a value less than '1' would occur if the trait was not stereotypic of the group in question. The seven characteristics were rated by six different social groups, yielding 42 DRs. Thirty-seven of these were significantly different from '1'. Generally, the seven traits were seen as stereotypical of Afro-Americans i.e. most of the DR scores were greater than '1'. McCauley and Stitt therefore concluded that the DR could indeed serve as a measure of stereotype perceptions.

One obvious advantage of using this ‘proportion of the group’ method is group consensus does not need to be obtained in order to determine whether or not an individual possesses a stereotype of a certain group. However, as interesting as this calculation might be, it is still dubious as to whether a stereotype is being identified. Simply distinguishing one group from another should not establish the existence of a stereotype. However, Biernat and Crandall (1994) compared three measures of stereotypes, concluding that the DR method is the most appropriate for investigating how groups are perceived to differ. They suggest that this may be a particularly useful method for determining groups of interest that are dichotomous in nature, for example, men/women and Blacks/Whites.

In sum, the measurement of stereotypes has come a long way since Katz and Braly’s checklist method. The basic premise of the Sociocultural perspective is that stereotypes are simply associations held by a community of people between traits and an individual’s social group membership. This idea has since been updated and refined by the Social cognitive perspective. Social cognitive researchers no longer have to assess the consensual beliefs of group members. Beliefs and knowledge about stereotypes held by individuals and the extent of such stereotypes can be evaluated. The following section on Social cognitive methods will explain how individual stereotype endorsements are investigated.

3.3.2 Methodologies within the Social Cognitive Perspective

To reiterate, the Social cognitive viewpoint represents stereotypes as a set of associations held by an individual about a social group. There have been a number of measures devised in order to assess individual endorsement of cultural stereotypes. This next section will describe some of these.

Free-response and Personal Evaluation. Esses, Haddock and Zanna (1993) suggested that the consensual approach of Devine (1989) which relies on group comparisons, was inappropriate as an individual measure of beliefs. In their study, the authors first employed Devine’s measure of free-response, but secondly they introduced an evaluative thought measure asking participants what their responses to

the first measure meant to them. Participants were first asked to list as many traits as possible that were typical of the target groups. The participants had to then rate the valence of each trait (between -2 and +2). Finally, for each trait, the participants indicated the percentage of the target group to which the trait applies. The significance and strength of the group-trait association will depend on whether the trait is evaluated positively or negatively and whether it is highly typical for the group in question (as a percentage of the total population). To compute a stereotype score, the participants' valences code and the percentage numbers were multiplied together for each trait, summed and finally divided by the total number of traits identified. This yielded an index of personal endorsement of stereotypes for each of the target groups. The more the score differed from '0', the more the participant saw the trait as stereotypical of the group. The valence of the score indicates whether the target group was evaluated positively or negatively. This measure was utilised to test the stereotypes of Canadians towards English Canadians, Chinese, Jews, Native Indians, Pakistanis and Arabs. Participants were also asked to rank how favourably they viewed each target group. Esses et al. found that the mean favourability ratings and the stereotype calculations were significantly and positively correlated. Using a similar procedure, Eagly and Mladinic (1989) found that a stereotype measure predicted attitudes towards men and women, as well as towards political groups. Biernat and Crandell (1994) suggest that this method may be most appropriate for investigating how individuals learn social stereotypes, how the operation of group norms occurs and how group and individual level stereotyping are associated. Thus, the free-response method is ideal for identifying the prevailing beliefs about certain groups and when combined with a thought measure, provides information about people's personal endorsements of such beliefs.

However, the methods described above are only useful if participants are actually willing to reveal their personal endorsement of stereotypes. What does this mean? In Chapter Two, societal norms were described as changing. Previously, it was acceptable for people to express a negative view about minority groups. As mentioned before, currently, this practice is deemed unacceptable. Society promotes a more egalitarian treatment of people of different ethnic groups. Consequently, people have become reluctant to view any negative opinions (such as stereotypes) about

minority groups. This means that individuals may consciously edit their responses on self-report measures (like those measures described above) in order to portray themselves in a socially desirable way. Privately, however, they may still hold negative stereotypes of certain social groups. Researchers are aware of peoples' abilities to edit their responses on stereotype questionnaires. They have therefore developed measures designed to overcome peoples' fears of social disapproval.

Unobtrusive Measures. In the 1970's, researchers demonstrated that what people said about ethnic groups did not correspond with what they believed or felt. Given that social norms may affect individual reports, this subtle and contemporary form of racism was assessed using more indirect self-report measures. For example, Weitz (1972) found that a measure of evaluative reaction to an Afro-Caribbean person detected negative feelings that contradicted previously expressed statements that showed no racial biases. Sigall and Page's 'bogus pipeline' study (1971) showed that when participants were asked questions about their racial attitudes under conditions that allegedly revealed their 'true' attitudes (participants were told that the machine they were attached to could detect dishonesty), they reported more negative racial attitudes than when they were not under this covert surveillance. For example, participants rated African American people as more sensitive than other Americans on a self-report measure. However, when the participants were attached to a 'bogus pipeline' truth-machine, they rated African Americans as less sensitive. Similarly, Gaertner (1973) found that direct racial bias and indirect racial bias existed in Americans. The author asked people whose voices sounded typically African American and white American to call members of the Conservative and Liberal parties. The caller pretended to have broken down on the highway and with his final dime attempted to make a call to the emergency services. The caller claimed to have dialled an incorrect number. Having described this situation, the caller then asked the recipient of the phone call for help. Gaertner found that Conservatives were more helpful to the White-sounding people than the African American-sounding people, whereas the Liberals showed no difference. Interestingly, the Liberals were more likely to hang up on the African American-sounding than the White-sounding person before they even found out the reason for the call.

In another study of this kind, Sagar and Schofield (1980; also see Duncan, 1976) asked participants to observe and rate the behaviours of Black and White people without specifically drawing their attention to the ethnicity of the target. A variety of ambiguously aggressive behaviours performed by Black or White perpetrators to Black or White victims were verbally described to individual participants (the race of the story characters were shown by photographs). Participants then rated the perpetrators on a mean/threatening dimension and a playful/friendly dimension. They also completed scales on certain behaviours (e.g. strong-weak, threatening-harmless) to rate the personal traits of the perpetrator and victim. They found that the Black perpetrators were rated as exhibiting greater aggression, despite the White perpetrators exhibiting the same level of behaviour. They also rated the personal traits of the Black characters as being physically stronger than those of the White characters. This type of research has established the existence of stereotype-influenced judgements, despite the stigmatising feature of the target groups not being the focus of the participant's attention.

3.4 Measures of Implicit Stereotypes

Although unobtrusive measures revealed stereotypic responses by attempting to overcome self-presentational issues, the Social cognitive approach was taken further by employing reaction time (RT) tasks. RT tasks are based on Fazio's notion of group-trait associative strength. That is, the stronger the association between target group and stereotype trait, the more quickly a stereotype-consistent response would occur. In other words, if a person holds stereotypes about a certain group of people, stereotype-consistent stimuli will be responded to faster than stereotype-inconsistent stimuli. Because RT tasks measure impulsive responses to stimuli, participants will be unable to edit their responses. RT measures have thus been used to study automatic stereotype associations.

In order to measure Fazio's idea, a priming paradigm consisting of two parts is typically used. The first part is an activation phase, while the other is the test phase. The activation phase (using prime stimuli) prompts the memory of a category and its

related attributes. The test phase tests the characteristics of the category (or target stimuli) where strongly associated characteristics in memory are responded to faster than weakly associated characteristics. For example, in an experiment of name categorisations, 'James' following 'aggressive' will be categorised as 'male' faster than 'James' following 'domesticated'. The basic idea of the priming paradigm is to activate a certain category in an individual's mind, which in turn will be associated with certain attributes of that category.

In keeping with the notion that stereotypes have two distinct cognitive and evaluative components, RT assessments have been developed to tap into each component separately. Implicit cognitive stereotype measures have used variations of the priming task where target stimuli are categorised either by semantic content (e.g. whether they are words or non-words, or members of two distinct groups etc.) or by valence (e.g. whether the words are positive or negative). Implicit evaluative stereotypes have been investigated by the Implicit Association Test (IAT), rather than the priming task. RTs in the IAT depend on the strength of association between a certain target group and traits relative to a different target group and the same traits. The following review will describe how cognitive and evaluative stereotypes have been identified implicitly. Implicit cognitive stereotype research will be reviewed first.

Implicit Cognitive Stereotype Priming Measures. Gaertner and McLaughlin (1983) used the priming paradigm and presented participants with two strings of letters. Participants were asked to indicate if both strings were words or non-words. The participants made their responses using a computer keyboard marked with a 'yes' key and a 'no' key. The interest for Gaertner and Dovidio was the speed at which 'yes' was the response to the two words in the pair. The words used were stereotypes of white and black ethnic groups. They found that participants responded faster to the word 'White' and positive word pairs than to the word 'Black' and positive word pairs (e.g. white-ambitious, black-ambitious). This was not the case with negative traits (e.g. white-stupid, black-stupid). This pattern was similar regardless of responses on a self-report prejudice measure. These findings suggest that racial beliefs include a positive bias for 'whites' but not a negative bias against 'blacks'.

Dovidio, Evans and Tyler (1986) criticised Gaertner and McLaughlin's work for not distinguishing between evaluation and cognition effects – that is, the stereotype-consistent words used for the Black social group were all negative and the stereotype-consistent words used for the White social group were all positive. This, therefore, made it impossible to determine whether the association latencies were due to the stereotypes or to the positive and negative valence of the words. Dovidio et al. used five types of test words in their research: positive and negative White stereotypes, positive and negative Black stereotypes and non-person characteristics. Positive words were responded to faster than negative words for both social primes, as were words previously deemed as more stereotypical for a certain group compared to non-stereotypical words (e.g. 'ambitious' was responded to faster with 'White' than with 'Black'). In addition, negative words, whether congruent or incongruent, were generally responded to faster following the 'Black' prime than the 'White' prime. Dovidio, et al. supported the notion that racial categories mediate the information processing of stereotype words and positive and negative words. That is, these primed group words facilitate the retrieval of stereotypes of that group, as well as facilitating negative evaluative stereotypes with 'Black' primes.

Zarate and Smith (1990) conducted a priming study, which also identified the presence of implicit stereotypes. Participants were presented with stereotype adjectives for 1500ms on a computer monitor. Immediately afterwards, on a bigger screen behind the computer monitor, a photo, depicting either a Black man or woman, or a White man or woman, was shown. Participants had to rate how well the trait described the target. Words that were stereotypical of the target group were responded to faster than words that were not stereotypical of the target group. It was found that the participants, who were faster at categorising targets by race and slower to categorise targets by gender, were more likely to rate the terms in a racially stereotypic manner. Zarate and Smith proposed that stereotypes are stored in memory in association with social group labels and that these associations are activated when a target group member is categorised, indicating the mediating effect of stereotypes on social categorisations. In addition, the authors noted that race perception impacts categorisation more than gender perception.

In the studies described above, the opportunity for a more controlled response process may have occurred for three reasons. First, participants were either made aware that the aim of the study was to investigate social judgements about racial groups. Second, participants were likely to make the link between the stimuli. Finally, the prime's stimulus onset asynchrony of 1500ms could have easily permitted conscious processing and therefore the editing of responses. Thus, researchers have been criticised for not necessarily demonstrating the automatic process that implicit stereotype activation fundamentally is (Greenwald & Banaji, 1995; Bargh 1994).

According to Bargh (1994), cognitive psychology considers automatic processing to be more complex than the studies above imply. Although automatic processing cannot be independent of controlled features, there needs to be some automatic features included in their investigation. *Intentionality* refers to the aim of the person during the task itself. That is, the extent to which the individual does not intend to initiate a process reflects a lack of intentionality. If the process is activated by more environmental aspects, then this is unintentional automaticity. *Efficiency* refers to the extent to which a judgement process demands attentional resources (e.g. time or cognitive capacity). A process will be considered efficient if fewer attentional resources are required. That is, overloading people with information to distract their attention from the real purpose of the task can determine the level of efficiency of a process. *Controllability* indicates the possibility that a person who perceives a situation as affecting his or her judgement is motivated and able to counteract it. That is, an individual will not simply categorise a target, but will seek additional information about him or her and will use this information to form a more balanced picture of the target. Finally, *lack of awareness* of a cognitive process can be achieved because the individual is simply unaware of the stimulus (e.g. through subliminal perception), unaware of the interpretation of the stimulus, or unaware of the stimulus's influence on judgement or affect. The methodology that will be described next is consistent with Bargh's notion that implicit processes can be studied when the individual is unaware of the stimulus, unaware of the interpretation of the stimulus, or unaware of the influence of the stimulus on judgement or affect.

Torres and Perez (2001) subliminally presented the target group words of 'White' and 'Black' to their participants in a priming phase. These words were individually presented between two strings of random letters out of the participant's conscious awareness, so as to activate any links to associated stereotypes stored in memory. Stereotype words exclusively consistent with each target group were then randomly presented immediately after the priming phase. Participants were asked to categorise these words as either positive or negative as quickly as possible. They found that stereotype-consistent words were responded to faster than stereotype-inconsistent words. It seems that this is a useful paradigm for the purposes of the present thesis because the stimuli are presented entirely outside of the participants awareness. This method can therefore identify a more automatic association between social groups and their stereotypes.

Despite understanding that stereotypes consist of cognitive and evaluative components, evaluative stereotypes have not been investigated as often as cognitive stereotypes. The next section will outline how research using the IAT can investigate implicit evaluative stereotypes.

Implicit Evaluative Stereotypes Priming Measures. The Implicit Association Test (IAT) was developed by Greenwald, McGhee and Schwartz (1998). It is a method that does not use the subliminal presentation of stimuli to activate stereotypic associations. Instead, it considers that associative links between certain groups and their respective evaluative traits result in faster responses than if the groups and traits were mixed. Thus, if the traits were implicitly perceived as stereotypical of one group and not the other, RTs would be faster for that group-trait combination. The schedule of a typical IAT is described below:

Table 1 – IAT components

	LEFT KEY (A) – marked on keyboard	RIGHT KEY (S) – marked on keyboard
Block 1	Pleasant words	Unpleasant words
Block 2	Group 1	Group 2
Block 3	Pleasant + Group 1	Unpleasant + Group 2
Block 4	Group 2	Group 1
Block 5	Pleasant + Group 2	Unpleasant + Group 1

The association between an attribute dimension (valence, in the example above) and a target-concept (groups, in the example above) is assessed. The first block, as indicated in Table 1, introduces the attribute dimension i.e. distinguishing pleasant words from unpleasant words. Discriminations are performed by assigning one type of word to a response with the left hand and the other type of word to a response with the right hand. In the example above, the attribute is valence – is the stimulus pleasant or unpleasant? Block 2 introduces the target-concept (i.e. Group 1 and Group 2 stimuli, such as ethnic names) in a similar way to the attribute dimension. Block 3 combines Blocks 1 and 2's response assignments, where the stimuli for each block randomly appear for categorisation. The fourth block then reverses the response assignments of the target-concept in the first block and responses are made using these new responses assignments. The fifth block then combines Block 1 and the assignment for target-concept in Block 4. If the target categories are differentially associated with the attribute, the respondents should find one of the combined tasks (either Block 3 or Block 5) easier than the other. Implicit attitude is measured by the difference in difficulty between the two blocks. Counterbalancing occurs by changing the response assignments in Block 2 (i.e. Group 2 with the left key and Group 1 with the right key) and continuing the experiment as described above.

This procedure has been typically used to measure implicit attitudes (e.g. Greenwald, McGhee and Schwartz, 1998; Rudman, Greenwald, Mellott & Schwartz, 1999). However, as reported in Chapter Two, Fiske and Taylor defined evaluative stereotypes to include valence (p.16). In addition, according to Greenwald, McGhee and Schwartz (1998), the IAT procedure measures an underlying automatic evaluation. In other words, the IAT is sensitive to automatic associations of an evaluative nature.

The authors suggest that, in this sense, the IAT is not dissimilar in objective to cognitive priming procedures for measuring automatic evaluation (such as by Fazio, Sanbonmatsu, Powell & Kardes, 1986; Greenwald, Klinger & Liu, 1989; Perdue & Gurtman, 1990; Torres & Perez, 2001). Indeed, prior to the development of the IAT, evaluative semantic priming measures were used to assess automatic evaluative associations (e.g. Bargh, Chaiken, Govender & Pratto, 1992; Fazio, Sanbonmatsu, Powell & Kardes, 1986; Greenwald, Klinger & Liu, 1989). It is for these reasons that the IAT will be used as a measure of implicit evaluative stereotypes in the present thesis.

A positive property of the IAT method, as well as priming methods, is that the IAT is relatively impervious to self-presentation strategies. That is, it would be nearly impossible with this method to suppress unconscious cognitions. Therefore, this method has been used a number of times to explore attitudinal biases. In Greenwald et al.'s original paper, the IAT was used in three experiments to measure implicit judgements along the associated attribute dimension of pleasant/unpleasant.

Evaluations towards flowers/insects and musical instruments/weapons were tested in the first experiment. Experiment 2 investigated biases toward Korean Americans and Japanese Americans and experiment 3 combined the task of classifying Black and White names with discriminating pleasant and unpleasant words. Each of the three experiments produced findings that suggested the IAT is sensitive to automatic evaluative associations: flowers were revealed to be viewed more positively than insects, as were musical instruments when compared with weapons; white Americans showed an implicit negative evaluation toward black Americans, regardless of their explicit measures scores; and inter-group judgements between Korean and Japanese participants were shown to validate historically-related opposition. Koreans were found to have implicit negative evaluations against the Japanese and the Japanese were found to have implicit negative evaluations against the Koreans.

Rudman, Greenwald, Mellott and Schwartz (1999) conducted research to extend the usefulness of the IAT as a measure of implicit stereotypes and prejudice. The first experiment investigated prejudice based on religious background (Jewish and Christian religions). Jewish participants responded faster when Jewish names were

paired with pleasant words and Christian names were paired with unpleasant than when Jewish names were paired with unpleasant words and Christian names with pleasant words. In a similar vein, Christian participants responded faster when Christian names were paired with pleasant words and Jewish names were paired with unpleasant than when Christian names were paired with unpleasant words and Jewish names with pleasant words. Logistic regression suggested that the IAT can effectively identify subjects who explicitly deny any preference for one group over the other. Further experiments showed that university students exhibit implicit stereotypes and prejudice more towards older people than younger people. In addition, the IAT has successfully demonstrated the existence of implicit sexism (Rudman, Greenwald & McGhee, 1998; Rudman & Kilianski, 2000) and implicit self-esteem (Farnham, Banaji & Greenwald, 1999).

Comparison with explicit self-report measures suggests that the IAT is more resistant to self-presentational factors. Thus, implicit stereotype research has generally shown that despite what participants report on questionnaire measures, a strong tendency to automatically distinguish and differentially evaluate in-group against out-group members emerges when response latency tools are used. In particular, these evaluations have been shown to have negative implications for inter-group behaviour, especially when actions are spontaneous or uncontrollable.

The IAT and priming measures seem to dominate this research area of implicit stereotypes. Both methodologies measure stereotypes as the evaluative and cognitive difference respectively between two categories, where an IAT target word is the equivalent of a priming task's prime stimulus. In addition, both procedures put categories for which an attribute is to be measured (i.e. target concept in the IAT and category labels in priming tasks) with items that have well-established attribute values (attribute categories and priming target stimuli). Nevertheless, the newer IAT has possibly been the more controversial implicit measure in race research. A number of researchers have suggested that IAT effects can be artificially increased by other extrinsic factors. For example, following Zajonc's (1968) theory that familiar stimuli are responded to more quickly than unfamiliar stimuli, familiarity may contribute to the difference in IAT effects more than implicit attitude bias (Biernat & Crandell,

1994; Linville, Salovey & Fischer, 1986). This may be especially true of stereotype research where more familiar same-ethnic names and less familiar different-ethnic names may be used as the target concepts. However, Dasgupta, McGhee, Schwartz and Banaji (2000; Greenwald, McGhee & Schwartz, 1998) did not find any evidence that familiarity increases the IAT effects.

Greenwald, McGhee and Schwartz (1998) believe that RT can be dependent on the level of exposure one has to one's own ethnicity. Essentially, an Indian person reared in India would show a stronger association with in-group targets and pleasant words than if a similar person was reared in the UK. The covariation between positivity and own-ethnicity evaluation therefore is only useful if the participants are exposed to their own culture. Thus, when using the IAT in stereotype research, participants should be equally exposed to their own culture.

Brendl, Markman and Messner (2001) conducted a study to evaluate the use of the IAT. They found that participants responded faster to names than to non-words. However, where previously this finding would have been interpreted as suggesting that there was an implicit negative evaluation of non-words, two alternative explanations were given. First, this finding implies people made pre-existing evaluations about non-words, despite these being stimuli that did not have any prior associations. Second, the longer RTs simply indicate that participants recognise a difference in the difficulty levels of the two blocks, indicating a threshold shift rather than non-words having a negative valence. Finally, Rothermund and Wentura (2001) found that the IAT is sensitive to procedural variable effects. That is, the order of performing compatible and incompatible blocks increases the evaluative effects, possibly by compromising the location of zero (for no IAT effect) so that individuals appear biased in the predicted direction. However, Mierke and Klauer (2001) investigated this criticism and found that this variable effect can be removed by reducing the number of trials in each experimental block. Compatibility order effects can be eliminated completely by further reducing the number of combined-task trials. An advantage of the IAT is that its effect size is twice as large as equivalent priming tasks, indicating better sensitivity to evaluate attitudinal difference.

3.5 Chapter Summary

In the research described in the present thesis, measures of both explicit and implicit ethnic stereotypes will be employed in order to establish whether there is a link between stereotype judgements and ratings of children's behaviour. This chapter has outlined the historical development of stereotype measurement, which maps onto the conceptual development of stereotype research described in Chapter Two. Stereotype measurement has moved from explicit self-reports to implicit RT tasks. Implicit cognitive stereotypes are typically assessed with priming tasks. In priming tasks, test words are categorised following the subliminal presentation of prime words. The strength of the association between the test and prime words is indicated by the speed at which the test word is categorised. Torres and Perez (2001) have developed a good automatic measurement of stereotypes. Implicit evaluative stereotypes, on the other hand, have been assessed with the IAT. The IAT uses category headings that are either congruent with stereotypes ('pleasant' and 'in-group'/'unpleasant' and 'out-group') or incongruent with stereotypes ('pleasant' and 'out-group'/'unpleasant' and 'in-group'). In the present thesis, both evaluative and cognitive contents of implicit stereotypes will be explored using the IAT and priming measures respectively. Chapter One explained how a bias in perception of ethnic minority groups can lead to inaccurate ratings on behaviour scales and Chapters Two and Three have followed the major changes in stereotype investigation. The next chapter presents Study One in which a study of the nature of Asian stereotypes held by adults is reported.

CHAPTER FOUR

Study One

4.1 Chapter Overview

In Chapter One, stereotypes were described as potentially playing a role in the ‘hidden bias’ of Asian children’s behaviour ratings. In the literature, stereotypes have been documented to be formed either consensually (influenced more by societal norms) or individually (influenced more by direct contact with social groups). The objective of the present study was to understand the content of racial stereotypes held by teachers about primary school children’s behaviour from a consensual perspective. A free-response questionnaire with a stereotype endorsement question sheet was administered to teachers. Striking differences were found in the stereotypes reported by teachers for South Asian, Afro-Caribbean and white British children. Asian children’s behaviour was identified as being more stereotypically positive than the behaviour of their white British peers; Afro-Caribbean children’s behaviour, on the other hand, was identified as being more stereotypically negative than the behaviour of white British children. Male behaviours were generally seen as more negative than female behaviours. These stereotypes largely replicated the pattern of behavioural stereotypes previously identified for children from these ethnic and gender groups. In addition, teachers felt that their profession endorsed ethnic stereotypes less than the general public. The stereotypes identified will be used to create measures of stereotype endorsement in subsequent studies.

4.2 Introduction

It has been established that behaviour problems are of major concern to clinicians and educators alike. This issue seems to be particularly important because it appears that the ethnicity of a child may be a factor in behaviour rating and therefore the identification of problematic behaviour. Research demonstrates a disproportionately high rate of externalising behaviour problem symptoms in Afro-Caribbeans (e.g. Costello & Janiszewski, 1990) and a disproportionately low rate in Asians (e.g.

Hackett, Hackett, & Taylor, 1993). However, in the past two decades, research has challenged the legitimacy of these figures. Rating scales, in particular, have been criticised for their racial insensitivity (e.g. Reid, 1995). For example, there is a growing body of evidence suggesting that people perceive cultural differences in the expressions of behaviour which do not actually exist. That is, a child's ethnicity affects how his or her behaviour is perceived and consequently reported. Sonuga-Barke et al. (1993) supported this viewpoint when they found a consistent over-rating by teachers of hyperactive behaviours displayed by South Asian children in the UK, an over-rating that is normally disguised by low referral rates of Asian children to clinical services. The authors suggested that this 'hidden bias' might be a consequence of ethnic or racial stereotypes that form a basis against which behaviour judgements are made.

Stereotypes have been conceptualised as cognitive and/or evaluative mental representations created from positive or negative beliefs about the characteristics of a group of people which are then used to judge an individual from that group. Biernat, Manis and Nelson (1991) propose that stereotypes of a social group create shifting standards so that, effectively, one group is judged against one standard and a different group is judged against another, perhaps, more strict or more lenient, standard.

Ashmore and Del Boca (1981) believe that it should not be assumed that knowledge of stereotypes equates with personal opinion, suggesting that there is a fundamental distinction between knowledge of a stereotype and its endorsement. That is, although an individual can identify a public stereotype, their personal belief may not necessarily correspond with that stereotype. To this end, Esses et al. (1993) believe that a valance measure and a 'percentage of the group' measure should also be included in stereotype investigations in order to understand the personal meaning of each stereotype mentioned by the participant. It is for this reason that a two-part measure (investigating general stereotypes and individual endorsement of the stereotypes) has been used in the current study. Banaji and Greenwald (1994) believe that in modern society people are less likely to admit to possessing stereotypes. Therefore, there is likely to be a difference between one's explicitly reported knowledge about ethnic stereotypes and the extent to which one supports these stereotypes.

Thus, the aim of this study is to begin to understand the role of stereotypes in the 'hidden bias' phenomenon. In past research, stereotypes about Asian people have included passive and timid (Tong, 1983), hardworking (Aguilar, 1999), kind, honest and conforming (Eagly & Kite, 1987). Moreover, Taylor (1986) has documented that these stereotypes suggest that Asian children are reared and consequently behave, in a 'less hyperactive' manner and white British children are opposingly reared in a 'more hyperactive' manner. It is proposed that South Asian children's behaviour may be perceived differently to that of their white British peers. Yet, it also seems relevant that stereotypes are specific to the cultural setting from which they developed. Most of the stereotype literature was conducted a number of years ago (e.g. Guichard & Connolly, 1980), in the US (e.g. Tong, 1983) and with a general definition of 'Asian', which typically includes Far-East Asians (Marsella, 1979). Stereotypes may have changed since this era; they may be different in the UK and for people specifically from the Indian subcontinent (as opposed to all people from Asia). Therefore, it is necessary to obtain more recent, relevant and specific stereotypes about the ethnic groups used in this research. Once current stereotypes about Asian, white British and Afro-Caribbean children have been established, this information can be used to further explore the links between stereotyping and behaviour rating, initially by developing stereotype measures.

As mentioned in Chapter Three, stereotypes have been explored in a number of different ways, but a key piece of research that provides a stepping stone for this first study is that of Devine (1989). From the Sociocultural perspective, Devine purports that possessing stereotypes is an inevitable consequence of living in any society. One will inescapably learn the values of one's own society, whether one is aware of these values or not. Thus, what one watches on television, what one reads in books and listens to on the radio shapes one's thinking about social categories. Hence, if the stereotypes within a society are identified, it can be implied that the stereotypes of an individual are known because individuals are likely to be strongly influenced by societal beliefs (Devine, 1989). Thus, the first step in exploring the link between perception of behaviour and contemporary stereotypes is to directly examine people's knowledge, or content, of the current cultural stereotypes of South Asian children in the UK. A free response format in which respondents spontaneously report

stereotypes was employed in order to avoid restricting the stereotype range. Because the 'hidden bias' phenomenon investigated has been found in teaching staff and as they have daily access to a range of children's behaviours, primary school teachers shall be the focus of this study. Participants are simply asked to list their knowledge of ethnic stereotypes, regardless of their personal belief. Teachers are also asked to complete an endorsement questionnaire with the whole of the teaching profession in mind to minimise personal implication and social desirability forces (Banaji & Greenwald, 1994).

As the aim of the present study is to measure the content of public stereotypes and endorsement of these stereotypes to certain groups of people, it was hypothesised that:

- 1) The content of stereotypes for South Asian children will differ from those for white British children of the same age: Asian children will be stereotyped as exhibiting more good/positive behaviour, relative to their white British peers.
- 2) The content of stereotypes will be different for males and females: males will be reported to exhibit more bad/negative behaviours than females.
- 3) Teachers, as a whole, will claim to endorse ethnic stereotypes to a lesser extent than the general public.

4.3 Method

4.3.1 Participants

The sample for this study was a population of 58 primary school teachers at 7 primary schools from two towns in southern England. All participants were volunteers of various ethnic groups (52 white British, 3 Indian, 1 Pakistani and 2 others). Of the participants, 51 were female and 7 were male (all males were white British). The sample's mean age was 35.5 (age range from 22 to 59). On average, the teachers had been teaching for 10.9 years ($SD= 9.37$). Although the teachers taught from Year 1 (5-6 year old children) to Year 6 (10-11 year old children), the modal year taught was

Year 3 children (8-9 year olds). Teachers demographic information only yielded minor significant differences on stereotype assignment¹.

School demographics: Of the seven schools, five were at least 50 percent white British in student composition (50 teachers). The remaining two schools were at least 50 percent South Asian in student composition (8 teachers). The ratio of Asian pupils to Asian teachers was 844:8. The mean number of male students at the schools was 152.3 (SD=55.4) and the mean number of female students at the schools was 167.3 (SD=51.6). The ratio of female to male teachers over all schools was 7:1. The socio-economic status of all schools was 'low'. Stereotypes reported by teachers at predominantly white British schools did not systematically differ from those reported by teachers at predominantly Asian schools².

4.3.2 Design

Teachers listed stereotypes for six social groups (either white British females, white British males, South Asian females, South Asian males, Afro-Caribbean females or Afro-Caribbean males). Thus, the study used a 3(target ethnicity) x 2(target gender) repeated measures design.

4.3.3 Materials

In order to identify primary school teachers' beliefs about the general public's stereotypes of various ethnic and gender groups, an open-ended questionnaire was employed. This methodology produced both qualitative and quantitative data, which is a useful way to explore the various beliefs held about children's behaviours in an unrestricting manner. Each questionnaire had two parts (see Appendix A).

¹ Repeated measures ANOVA analyses found that Asian teachers were more likely to stereotype an Asian male as disruptive and Afro Caribbean males as disruptive and aggressive. Asian females were less likely to be stereotyped as passive and domesticated by Asian teachers. Teaching experience and gender did not yield any differences.

² Repeated measures ANOVA tests indicated that teachers from predominantly Asian schools stereotyped males as more disruptive than females.

The first part consisted of six tables, each consisting of three columns. Each table was headed by the name of a target group (either white British females, white British males, South Asian females, South Asian males, Afro-Caribbean females or Afro-Caribbean males) and the participant was asked to identify positive, negative and neutral behavioural or performance-related stereotypes for each group. Afro-Caribbean targets were included in this study to validate the findings that have already been reported about this ethnic group, but also to help the participants generate as many stereotypes as possible. Also, it helped mask the most important focus of a comparison between white British and Asian children.

The aim of this task was to identify the content of ethnic stereotypes. However, due to the sensitivity of the topic and the reluctance of people to admit potentially negative thoughts about young children, it was emphasised that the teachers should not identify their own personal stereotypes, but should identify the stereotypes that they thought were held by people, in general. They were asked not to base their responses on their own experiences. These instructions had the aim of distancing the teachers from their responses and so encouraging them to identify more stereotypes.

In Part Two, teachers were asked to rate whether they endorsed racial stereotypes more than, as much as, or less than the general public for each ethnic group. In order to ensure the confidentiality of the responses, and to therefore acquire more valid and accurate stereotypes, the participants were also given an envelope in which they were asked to place both parts of the completed questionnaire. The envelopes were then placed in a sealed box.

Participants' demographic information was collected. This included sex, age, ethnicity, number of years they had taught in total, the number of years they had taught at their current school, which academic year they taught at this school, their total years experience of teaching minority children and their total years experience of teaching children with disruptive behaviours. School demographic information was also recorded. This included the average socio-economic status of the attending children's families, the total number of children attending the school, the number of

males and females per ethnic group, the total number of teachers at the school and the number of male and female teachers per ethnic group (see Appendix B).

4.3.4 Procedure

Participants were briefed about the purpose of the study and instructed on how to complete the first part of the questionnaire. The participants were instructed to complete both sections of the questionnaire individually, and as openly and as honestly as possible. They were assured that their answers would remain confidential and anonymous at all times. The order of presentation of the six target groups was counterbalanced.

4.3.5 Treatment of the Responses

Once all the responses from all the participants were collected, stereotypes from 20 randomly selected questionnaires were recorded to form a frequency list. Although stereotypes about behaviour and performance at school were specifically requested, responses occasionally listed descriptive features (e.g. dirty, attractive), family characteristics (e.g. spoilt by parents, domesticated) and social habits (e.g. hang around in groups, form lasting friendships). These traits were also coded. This exercise resulted in 82 stereotype codes (Appendix C). From the stereotypes generated, positive stereotypes were matched, where possible, with a negative opposite (there were 74 bipolar dimensions). The remaining stereotypes were left unmatched (8 codes). The stereotypes from the 58 questionnaires were then classified against this 82-item code.

The 82 stereotype codes were employed as separate dependent variables. Raw data were generated by recording whether the participant mentioned the code (denoted by a '1') or not (denoted by a '0'). Each stereotype received one classification. This was completed for each of the 6 target groups. This process was conducted by two independent raters.

Inter-rater reliability: Before analyses could be performed on the data, inter-rater reliability on the occurrence of the stereotype codes was calculated using Cohen's kappa measurement of agreement for each of the 82 stereotype codes. All 82 x 6 kappas indicated a satisfactory degree of inter-rater reliability (range between .66 to 1.00; mean kappa=0.88, $p < .001$). Where there were disagreements between the two raters, those discrepant stereotype items were isolated and a third rater resolved the disagreement.

4.4 Results

The dependent variable for each of the six target groups was the frequency that stereotypes were mentioned. In order to increase reliability, stereotype assignments with total frequencies less than 10 (across the six target groups) were removed from the analyses at this stage. This reduced the number of reliable stereotypes from 82 to 45 (see Appendix D). In order to reduce the chance of Type I error associated with multiple univariate tests, a conservative p value of .001 (.05 divided by 45) was used to denote significant differences.

The dependent variables in the present study are dichotomous and this type of data is generally analysed using Chi-squared analyses. However, Chi-squared analyses for repeated measures data are computationally complex. Fortunately, more common ANOVA analyses provide an adequate alternative to Chi-squared analyses (see Cochran, 1947; Hsu & Feldt, 1969; Lunney, 1970; Pearson, 1931; Sedikides, Oliver, & Campbell, 1994). Therefore, ANOVA analyses were used to analyse the current data. Repeated measures 3(target ethnicity) x 2(target gender) ANOVA analyses revealed ethnic effects on 27 of the 45 thematic codes. Table 2 reports the stereotypes for which there were significant main effects of ethnicity, gender and interactions (for a table with analyses of all the codes, see Appendix D).

Table 2 – The proportions and F values for the 27 codes for which there were significant effects (N=58)

Code	White		Asian		Afro-Caribbean		Ethnicity	F	
	Females	Males	Females	Males	Females	Males		Gender	Interact.
1. Quiet	19.00	1.72	36.21	6.90	1.72	1.72	16.90*	27.11*	13.54*
3. Extroverted	1.72	8.62	0.00	0.00	3.45	3.45	5.67*	.09	1.84
4. Quiet/passive ...	8.62	1.72	29.31	5.17	6.90	1.72	6.02*	17.02*	2.98
11. Hardworking ...	36.21	22.41	51.72	44.83	12.07	3.45	27.88*	6.45	.28
12. Unmotivated ...	5.17	17.24	3.45	8.62	10.34	29.31	4.49	13.51*	1.73
15. Intelligent/more able	17.24	8.62	6.90	17.24	1.72	0.00	8.28*	.05	3.57
19. Well behaved ...	19.00	6.90	12.07	1.72	0.00	0.00	11.68*	10.33*	5.36*
20. Disruptive ...	1.72	29.31	0.00	8.62	6.90	29.31	12.63*	22.69*	6.18*
22. Aggressive/violent	3.45	16.00	0.00	12.07	1.72	18.62	5.86*	28.75*	3.07
23. Kind/caring	6.90	0.00	13.76	1.72	1.72	0.00	5.37*	10.47*	4.01
24. Bully/mean to others	3.45	10.34	0.00	0.00	3.45	6.90	5.10*	2.64	1.42
33. Conform to authority	19.00	6.90	29.31	10.34	6.90	1.72	8.69*	12.24*	1.95
34. Disrespect authority ...	3.45	13.79	0.00	5.17	3.45	17.24	5.24*	12.90*	1.66
39. Produce neat work ...	13.79	3.45	5.17	0.00	3.45	0.00	3.48*	10.90*	.65
43. Mathematical ...	3.45	44.83	1.72	15.52	0.00	3.45	18.97*	43.58*	13.31*
44. Poor at math ...	17.24	0.00	1.72	0.00	0.00	0.00	5.83*	10.89*	5.83*
45. Good at language ...	20.00	5.17	5.17	1.72	3.45	0.00	16.09*	17.07*	6.54*
46. Poor at language ...	3.45	22.41	6.90	3.45	0.00	0.00	12.38*	6.88*	5.19*
49. Good at art/dance ...	5.17	0.00	8.62	1.72	32.76	32.76	12.89*	2.98	.79
51. Athletic	1.72	22.41	0.00	15.52	34.48	62.07	25.52*	42.85*	.98
53. Enjoy sports/PE	1.72	36.21	0.00	19.00	3.45	8.62	5.64*	33.35*	9.53*
69. Positive family life	1.72	1.72	15.52	24.14	3.45	3.45	8.06*	1.96	1.50
70. Negative family life	1.72	0.00	8.62	19.00	0.00	1.72	3.84	11.88*	5.83*
78. Illegal behaviours ...	1.72	3.45	0.00	1.72	1.72	10.34	2.01	7.82*	1.48
80. Disrespect women	0.00	3.45	1.72	24.14	0.00	3.45	8.29*	14.19*	5.48*
81. Domesticated ...	13.79	1.72	39.66	0.00	5.17	0.00	15.50*	40.81*	14.86*
82. Spiteful/bitchy ...	18.62	1.72	1.72	0.00	3.45	0.00	10.09*	14.19*	6.90*

*p<.001

NB:- The figures in the tables represent the percentage of stereotype assignment per total participants, ie the frequency of stereotype assignment divided by the total number of participants (N=58) multiplied by 100.

4.4.1 Ethnicity Effects

There was a main effect of target ethnicity for 24 stereotypes. In order to identify where the main group differences were located, Tukey HSD analyses were conducted to control for the Type I error rate (Table 3).

Table 3 – Proportion of stereotype assignment to the three ethnic groups (N=58)

	White British	Asians	Afro-Caribbeans
Quiet	.21 _b	.43 _a	.03 _c
Extroverted	.10 _a	.00 _b	.07 _a
Passive	.10 _b	.35 _a	.09 _b
Hardworking	.59 _b	.96 _a	.16 _c
Intelligent	.26 _a	.24 _a	.02 _b
Well behaved	.26 _a	.14 _b	.00 _c
Disruptive	.31 _a	.09 _b	.36 _c
Aggressive	.31 _a	.12 _b	.28 _a
Kind	.09 _a	.14 _a	.02 _b
Bully	.14 _a	.00 _b	.10 _a
Conforms to authority	.26 _b	.40 _a	.09 _c
Disrespects authority	.17 _a	.05 _b	.21 _a
Produces neat work	.17 _a	.05 _b	.03 _b
Good at math	.48 _a	.17 _b	.03 _c
Poor at math	.17 _a	.02 _b	.00 _b
Good at humanities	.40 _a	.08 _b	.03 _b
Poor at humanities	.26 _b	.10 _c	.66 _a
Good at art/dance	.05 _b	.10 _b	.96 _a
Athletic	.24 _b	.16 _b	.96 _a
Enjoys sport	.38 _a	.19 _b	.12 _b
Encouraged by family	.03 _b	.40 _a	.07 _b
Disrespect women	.03 _b	.26 _a	.03 _b
Domesticated	.16 _b	.40 _a	.05 _c
Spiteful	.28 _a	.02 _b	.03 _b

NB:- Proportions with different subscripts differ significantly at $p < .05$

White British children were more likely to be stereotyped as being disruptive, aggressive, bullies, disrespecting authority and spiteful. However, they were also stereotyped as both good and poor at sciences and both good and poor at humanities, produce neat work, intelligent, kind and enjoy sport. When compared to Afro-Caribbean children, white British children were perceived as equally extroverted, disruptive, aggressive, disrespecting of authority and bullies. These prevalent white

British stereotypes were classified by the participants as both positive and negative in nature, where academic-related stereotypes were favourable and the behaviour-related stereotypes were negative.

Asian children were stereotyped significantly more than the other two target ethnic groups for being quiet, passive, hardworking, well behaved, conforming to authority and domesticated. In addition, only Asian males were considered to have encouragement from their families, although they are perceived to disrespect women. Asians were stereotyped as much as the white British children for being intelligent. Generally speaking, participants reported positive stereotypes of Asians.

In addition to those stereotypes already mentioned in relation to white British children, Afro-Caribbean children were stereotyped significantly more than the other two groups as being good at art/dance, athletic and disruptive. Again, the stereotypes were classified as positive in terms of performance-related characteristics, but negative in terms of behaviour-related stereotypes.

4.4.2 Gender Effects

There was also an overall main effect of gender for 21 stereotype codes, as shown in table 4 below.

According to publicly-held stereotypes, males were stereotyped significantly more for being disruptive, aggressive, lazy, scientific, poor at humanities, spoilt, athletic, liking sports, disrespecting women, taking part in illegal behaviours and disrespecting authority. In turn, females were significantly more likely to be stereotyped as more quiet, well behaved, passive, kind, conforming, good at humanities, poor at sciences, produce neat work, spiteful and domesticated than males.

In essence, from the pattern of prevalent stereotypes that has emerged, it can be seen that there are differences between the three ethnic and two gender groups - Asian children are stereotyped as being significantly less badly-behaved than their white

British and Afro-Caribbean counterparts. In comparison, Afro-Caribbean children are stereotyped as being more disruptive than their white British (and Asian) counterparts.

Table 4 – Proportion of stereotype assignment to the gender groups (N=58)

	Females	Males
Quiet	.57	.10
Passive	.43	.09
Unmotivated	.09	.55
Well behaved	.31	.09
Disruptive	.09	.68
Aggressive	.05	.66
Kind	.22	.02
Conforms to authority	.55	.19
Disrespects authority	.07	.36
Produce neat work	.22	.03
Scientific	.06	.47
Poor at sciences	.19	.00
Good at humanities	.45	.07
Poor at humanities	.09	.26
Athletic	.36	1.00
Like sports	.06	.64
Spoilt	.10	.21
Culturally intolerant	.03	.10
Illegal behaviours	.03	.16
Disrespect women	.02	.36
Spiteful	.31	.02
Domesticated	.59	.02

Thus, Asian children have been stereotyped more positively than their two ethnic peer groups. Afro-Caribbean children, on the other hand, have been stereotyped more negatively than the other two groups. White British children have been stereotyped positively and negatively. The stereotypes identified for males were more negative than those identified for females – males are stereotyped as being behaviourally worse than females, who behave more pleasantly.

4.4.3 Interactions Effects

As shown in Table 2, significant interaction effects between ethnicity and gender occurred on 12 of the codes: quiet, well behaved, disruptive, scientific, poor at sciences, good at humanities, poor at humanities, enjoy sports, spoilt, culturally

intolerant, disrespect women, domesticated and spiteful. One-way ANOVA tests (followed by Tukey HSD post-hoc tests, when significant) were used to identify the ethnicity effects and paired samples t-tests were used to identify the gender effects.

For six stereotype codes, the ethnicity effect was significant for females, but not males. White British, Asian and Afro-Caribbean females were perceived to differ in terms of the following codes: quiet ($F_{(2,171)}=12.66, p<.001$), well-behaved ($F_{(2,171)}=6.07, p<.01$), poor at sciences ($F_{(2,171)}=9.56, p<.001$), good at humanities ($F_{(2,171)}=12.68, p<.001$), domesticated ($F_{(2,171)}=14.96, p<.001$) and spiteful ($F_{(2,171)}=11.36, p<.001$). Asian females were seen as more quiet and domesticated than either the white British or Afro-Caribbean females. Perceptions of the latter two groups did not differ significantly. White British females were seen as more well-behaved, poorer at science, better at humanities and more spiteful than either the Asian or Afro-Caribbean females. Perceptions of the latter two groups did not differ significantly.

For five stereotype codes, the ethnicity effect was significant for males, but not females. White British, Asian and Afro-Caribbean males were perceived to differ in terms of the following codes: disruptive ($F_{(2,171)}=4.95, p<.01$), poor at humanities ($F_{(2,171)}=12.02, p<.001$), scientific ($F_{(2,171)}=18.01, p<.001$), enjoy sports ($F_{(2,171)}=7.17, p<.001$) and disrespecting women ($F_{(2,171)}=9.77, p<.001$). Asian males were seen as less disruptive and more disrespecting of women than either white British or Afro-Caribbean males. Perceptions of the latter two groups did not differ significantly. White British males were seen as poorer at humanities, more scientific and enjoy sport more than either the Asian or Afro-Caribbean males. Perceptions of the latter two groups did not differ significantly.

For the stereotype code 'spoilt', the ethnicity effect was significant for both females, $F_{(2,171)}=3.72, p<.03$ and males, $F_{(2,171)}=12.02, p<.001$. The pattern of means, however, differed for the two gender groups. Within both gender groups, Asians were seen as more spoilt than either the white British or Afro-Caribbean groups. Within each gender group, perceptions of the latter two ethnic groups did not differ significantly.

4.4.4 Endorsement of Stereotypes Identified

Teachers were asked to report whether they endorse the stereotypes for each target group as much as the general public, less than the general public, or more than the general public. Their responses were coded as '0' denoting that stereotypes were endorsed as much as the general public, '-1' as less than the general public and '+1' as more than the general public. Thus, a negative score indicates that teachers endorse the stereotypes less than the general public; a positive score indicates that teachers endorse the stereotypes more than the general public. A repeated measures 3(ethnicity) x 2(gender) ANOVA was conducted to test if the overall means for each group were significantly different from '0'. There were no main effects of ethnicity or gender, but the grand mean of -0.59 differed significantly from '0', $F_{(1,51)}=84.94$, $p<.001$. This shows that the teachers endorse stereotypes of all six target groups less than the general public.

4.4.5 Summary of Results

Teachers assigned different stereotypes to different ethnic groups. Those prevalent for the Asian children were predominantly positive; the white British and Afro-Caribbean stereotypes were a combination of positive and negative stereotypes. Gender effects indicated more behaviourally negative stereotypes for the males and behaviourally positive stereotypes for the females.

The endorsement supplement indicated that the majority of teachers did not feel that the teaching profession, as a whole, endorsed ethnic stereotypes as much as the general public.

4.5 Discussion

There were three primary findings. First, teachers identified different stereotypes for the three ethnic groups. Asian children were stereotyped as exhibiting positive behaviours, Afro-Caribbean and white British children were stereotyped as having both positive and negative behaviours. This finding supported the first hypothesis.

Second, teachers identified different stereotypes for males and females. Males were stereotyped as displaying more negative behaviours than females. Finally, as predicted, teachers reported that the teaching profession, as a whole, endorsed ethnic stereotypes to a lesser extent than the general public. The three predictions were therefore supported by the findings from this study.

In terms of ethnicity, overall, it can be concluded that Afro-Caribbean children were stereotyped as displaying more negative behaviours than the white British and Asian children, although some performance-related stereotypes were positive. In comparison, Asian children were rated more positively than the white British and Afro-Caribbean children. However, in general, the reported stereotypes relating to Afro-Caribbean children's behaviours can be seen as more negative than white British children's behaviours, whose behaviours, in turn, can be seen as more negative than Asian children's behaviours. This appears to be in keeping with previous literature. Of the negative behaviour stereotypes generated for the Afro-Caribbean and white British children, many could be considered major symptoms of behavioural problems, according to the DSM-IV (e.g. disruptive). In contrast, there was only one negative stereotype generated for the Asian children (disrespect women). The other positive Asian stereotypes were clearly not symptoms of behavioural problems (e.g. quiet, well-behaved). These findings closely resemble the findings of previous research. For example, Guichard and Connolly (1980) found that stereotypes about Asians are largely positive.

Teachers also identified different gender stereotypes. Generally, it can be said that male behaviours exhibited were rated more negatively than female behaviours. This is in keeping with the well-documented gender differences of, for example, ADHD. Males tend to be identified as exhibiting ADHD symptoms up to nine times more than females (e.g. Tannock, 1998).

These findings create a foundation for the research to be reported in the remainder of this thesis. If the stereotypes about these various groups are truly endorsed by an individual, then this individual will expect a member of each of the groups to behave in their corresponding stereotypical way. The Shifting Standards perspective (Biernat

et al., 1991) suggests that when a target individual does not behave in an expected manner, this may result in inaccurate perceptions of the individual's behaviour by the perceiver. This process can thus be seen to contribute to the 'hidden bias' effect because it is difficult to ignore a target's ethnic origin when appraising his or her behaviours. One would expect an Asian child to behave less 'hyperactively', based on the stereotypes they possess about the target group. Thus, with this lower minimum standard for Asian people's behaviour already set in mind, if an Asian person behaves more hyperactively than is expected of him or her, they will be perceived as more hyperactive than they objectively are, possibly warranting clinical referral.

In addition, the participating teachers did not feel that their profession endorsed the stereotypes as much as the general public. In other words, although they were aware of the existence of a range of stereotypes, teachers reported that they did not uphold or support the reported ethnic stereotypes. Therefore, there is a discrepancy between explicit stereotype knowledge and explicit stereotype endorsement. Does this imply that stereotypes do not play a role in the 'hidden bias' of Asian children's behaviour ratings? Social cognitive researchers (e.g. Devine, 1989; Fazio, 1986; Banaji & Greenwald, 1994) would not necessarily agree with this. As mentioned in Chapter Two, researchers have found this discrepancy between behaviour (e.g. rating behaviour on a questionnaire) and explicit reporting of racially-sensitive beliefs (e.g. stating personal levels of stereotype endorsement) to be of interest. They propose that people are either not prepared to report their beliefs honestly or are simply unaware of their beliefs. As a result, automatic stereotypes should be explored when researching socially sensitive topics (as explained earlier).

This initial study was designed to explore and establish the contemporary stereotypes British teachers feel their compatriots hold about ethnically diverse children's classroom behaviours and performances. These stereotypes will now be used to determine a set of stereotypes on the basis of which a questionnaire can be developed. The findings suggest that perceptions of white British and Asian children's behaviours are different. These stereotypical perceptions can therefore begin to provide evidence that stereotypes do play a role in inaccurate perceptions of Asian children's behaviours.

4.6 Chapter Summary

Explicit stereotypes of South Asian children were positive, white British children were both positive and negative and Afro-Caribbean children were negative. However, teachers did not believe that their profession endorsed ethnic stereotypes of these groups as much as the general public. Recently, however, research on stereotypes has investigated the concept of unconscious stereotypes, which focuses on the idea that people are not aware that they base their judgements on stereotypes or that they are simply editing their responses to appear less controversial, given their position in society. Therefore, as there is sufficient evidence from Study One to support the idea that different stereotypes do exist about different social groups and that these stereotypes are inescapably learnt from society, it seems reasonable to explore how implicit stereotypes play a part in this 'hidden bias' issue.

CHAPTER FIVE

Study Two

5.1 Chapter Overview

In Study One, stereotypes were thought to be different for different ethnic groups. Teachers claimed to stereotype ethnically diverse children less than the general public. Yet, in the past, Asian children have been found to be over-rated by teachers on behaviour scales, suggesting that perhaps unconscious stereotypes are influencing ratings of Asian children. To begin to test this idea, a three-part computer-based study was administered to university students. The first part was an explicit stereotype measure, the second part was a priming task to assess implicit cognitive stereotypes and the final part was the IAT implicit evaluative stereotype task. Explicit ratings of Asian children were positive, whereas explicit ratings of white British children were negative. The reverse was true of the implicit measures: both stereotype measures indicated that Asian children were subject to negative beliefs and evaluation.

5.2 Introduction

It is potentially damaging and certainly incompetent on the professional's part when any individual is labelled as suffering from psychological problems when they are not. However, when systematic referral biases occur with respect to some social groups, there is special cause for concern. As mentioned earlier, Asian children seem to be over-rated for exhibiting behaviour problems on subjective measures, relative to objective measures. Stereotypes are thought to play a major role in this bias because they predispose people to expect certain behaviours. Study One demonstrated that teachers generally felt that others stereotype Asian children to exhibit positive behaviours, e.g. quiet behaviours and white British children to exhibit negative behaviours, e.g. disruptive behaviours. In addition, participants believed that members of their profession endorsed the stereotypes less than the general public. Does this latter finding then suggest that teachers do not hold racial stereotypes? In Chapter Two, implicit stereotypes were introduced as playing a possible part given societal changes with time. Implicit stereotypes are unconscious and automatic, often

the driving force of one's belief system (Banaji & Greenwald, 1995). Explicit stereotypes, such as those obtained by self-report measures, are prone to distortion as individuals may want to appear unbiased to others or themselves, or perhaps because the individual is not, in fact, aware of their bias toward the object. This response editing is less likely using RT methodologies (Fazio, 1986) where stimuli are presented outside of one's awareness level and the instructions include responding as quickly as possible, to eliminate editing opportunities. That is, individuals have control over explicit, but not over implicit responses. For this reason, studies of stereotypes should employ measures of implicit stereotypes because these arguably tap into the individuals 'true', or uncensored, beliefs about different ethnic groups. In addition, both components of stereotypes (semantic and evaluative) will be assessed for a more complete exploration into stereotypes.

In order to test the possible role of explicit stereotypes and implicit stereotypes, a three-part measure was employed in the present study. First, the most common stereotypes from Study One for Asian and white British children (both boys and girls) were used to create an explicit measure of stereotypes. In Study One, participants were asked to identify the stereotypes held by the general public. Therefore, they presumably were not strongly motivated to edit their responses as there was no personal implication of their responses. In the present study, participants were instead asked to indicate their personal beliefs about the ethnic groups and therefore would be expected to be more strongly motivated to edit their responses. Second, a priming paradigm was included to investigate implicit stereotypes of different ethnic groups. A subliminal priming paradigm similar to that of Torres and Perez (1999) was also used to investigate implicit cognitive stereotypes. Here, some of the prevalent stereotypes from Study One were used as priming stimuli and ethnic names were used as target stimuli to be categorised. Third, an IAT task was used to address implicit evaluative stereotypes (Greenwald, McGhee & Schwartz, 1998). Although this 'hidden bias' phenomenon has been primarily found in teachers, the present study will not utilise teachers. It was difficult to gain the co-operation of teachers, but because the stereotypes identified were assumed to be consensual (generic to the British population), they presumably are applicable to university students.

The predictions for this study are:

- 1) Explicit Stereotype measure: Study 1 demonstrated that teachers have relatively positive explicit stereotypes of Asian children and relatively negative explicit stereotypes of White English children. Although similar findings are expected, it is possible that participants may have edited their responses on the explicit stereotype measure in order to appear unbiased;
- 2) Priming task: The priming task will reveal an association in memory between Asian names and stereotypes that were identified in Study One as being stereotypical of Asians and between white British names and stereotypes that were identified in Study One as being stereotypical of white British people (i.e. trials where the stereotype is congruent with the ethnic name will be responded to faster than trials where the stereotype is incongruent with the ethnic name);
- 3) IAT: There will be implicit in-group bias on the IAT. White British names paired with positive words and Asian names paired with negative words (in-group positive block) will be responded to faster than white British names paired with negative words and Asian names paired with positive words (in-group negative block).

5.3 Method

5.3.1 Participants

Fifty-five undergraduate students (40 white British, 14 British 'other' [Far-East Asian or Black] and 1 British South Asian) from the University of Southampton participated in the study, as part of their course credit. The South Asian participant was not used in the analysis as ethnicity could affect the IAT responses, leaving 54 participants in the analyses.

5.3.2 Materials

PHASE 1 - Explicit Stereotype measure. (Appendix E). Having performed ANOVA analyses on the data from the first study, 24 stereotypes were identified as being statistically different for the six target groups in Study One. Seventeen of these stereotypes were actually shown to be rated differently for the Asians and white

British in Study One (quiet, passive, hardworking, well behaved, good at humanities, spiteful, obedient, domesticated, disruptive, aggressive, disobedient, good at sciences, encouraged by family, produce neat work, spoilt, likes sport and disrespect women). 'Produce neat work' was removed because it was not related to behaviour or personality. 'Attentive' was included despite being removed from Study One's analyses for its low frequency because this stereotype can be conceptually linked with stereotypes such as 'well behaved' and 'obedient' in a classroom setting. It has also previously been found to be part of an Asian stereotype (Hackett et al., 1993). Therefore, its inclusion seemed appropriate. Although there was not an ethnic effect of 'talkative' in Study One, this stereotype was included as a stereotype of white British children here. The frequencies of this stereotype's attribution were marginally different for the two ethnic groups and so 'talkative' was included in this measure. Although equally prevalent among both groups, 'intelligent' was also included because it has been found in previous literature as a stereotype for Asians (e.g. Aronson et al., 1999). The stereotype word, 'unmotivated', was included because the difference between these two ethnic groups approached significance. 'Athletic' was also included because the interaction effect in Study One showed this stereotype word to be highly specific for white British boys. In addition to these 21 items, four further ADHD-specific characteristics, as identified from the DSM-IV (APA, 1994), were included. These were 'overactive', 'temper tantrums', 'fidgety' and 'inattentive'. This made 25 behaviours in total. A 7-point rating scale was used to indicate the typicality of these behaviours for the target group in question, where '1' was 'not typical' and '7' was 'very typical'. A practice trial was provided as part of the instructions to the participants.

The questionnaire was presented on the computer with one item per trial. There were four blocks in this phase, one for each target group (Asian girls, Asian boys, white British girls and white British boys). During each of the four blocks, the target group was stated at the top of the screen throughout the block. The behaviour stimulus appeared one at a time below the target group. The rating scale appeared at the bottom of the screen. Ratings of each of the stimuli in relation to the target group were made via the keyboard number pad. The next trial did not begin until the participant had indicated their response. Due to response editing, it is not expected that the explicit stereotype measure would reveal strong racial stereotypes.

PHASE 2 - Priming task. Participants were presented with five blocks of 40 trials each. Each trial ran as follows: A central fixation point (red cross) appeared in the middle of the screen for 500ms and was then proceeded by a forward mask (a string of 10 random letters) for 200ms. A stereotype identified from the first study was then shown for 150ms after which a backward mask (reverse of the forward mask) appeared for 70ms. An ethnic name to which the participant had to respond was presented until the name was categorised as Asian or white British. The ethnic names and stereotypes were presented an equal number of times during this phase. Participants were asked to focus on the red cross and their task was to indicate the ethnicity of the name shown as either white British or Asian. If the name was considered Asian, the left key (the 'A' key) was pressed and if the name was considered white British, the right key (the '5' on the number pad) was pressed. These keys were marked with a red sticker which covered the keys letter or number. Reminder labels were positioned at the top left and right corners of the screen. The first block was a practice trial and the remaining four blocks were experimental blocks.

The stimuli consisted of words that were presented as primes (stereotype words) or as test categories (ethnic names). The eight prime stimuli were four Asian congruent stereotypes (quiet, passive, hardworking and clever) and four white British-congruent stereotypes (loud, aggressive, lazy and stupid), as identified in the first study and used in the Explicit Stereotype measure. The stereotype words were suitably shortened to appropriately adapt to the priming task. The test stimuli were four Asian names (Imran, Omar, Aisha and Fatima) and four white British names (John, Edward, Sarah and Jane). Two of the four ethnic names were male and two were female. If participants implicitly stereotype, the Asian and white British names will be categorised faster when they are preceded by stereotypes congruent primes (e.g. 'Fatima' preceded by 'hardworking', 'John' preceded by 'loud') than when they are preceded by stereotype incongruent primes (e.g. 'John' preceded by 'hardworking', 'Fatima' preceded by 'loud').

PHASE 3 - IAT. The IAT used 24 stimulus words: eight words with a pleasant meaning (peace, friend, pleasure, loyal, gentle, honest, happy and laughter), eight words with an unpleasant meaning (filth, grief, stink, hatred, poverty, pollute, ugly

and evil) and the eight ethnic names from the priming task. The pleasant and unpleasant words were selected from norms reported by Bellezza, Greenwald and Banaji (1986) which have been used in other IAT experiments.

Design of the IAT. The five blocks of the IAT, described in Chapter Three, are illustrated in Table 5 below.

Table 5 – Illustration of the IAT to be used in Study Two

	LEFT KEY (A) – marked on keyboard	RIGHT KEY (S) – marked on keyboard
Block 1	Pleasant words	Unpleasant words
Block 2	Asian names	White British names
Block 3	Pleasant + Asian	Unpleasant + White British
Block 4	White British names	Asian names
Block 5	Pleasant + White British	Unpleasant + Asian

The participants first distinguish the evaluative dimension by pressing the marked left key for pleasant words and the marked right key for unpleasant words (same keys as for the priming task). The target concepts are then distinguished by pressing the left key for Asian names and the right key for white British names. Block 3 was a combined categorisation task. Participants responded to both pleasant words AND Asian names with the left key and to both unpleasant words AND white British names with the right key. In Block 4, the situation shown in Block 2 is reversed with white British names responded to with the left key and Asian names responded to with the right key. In the final block, the situation in Block 3 is reversed: participants respond to both pleasant words AND white British names with the left key and to both unpleasant words AND Asian names are responded to with the right key. The order in which participants performed Blocks 2 and 3, and Blocks 4 and 5, was counterbalanced across participants. For half the participants, Blocks 2 and 3 came before Blocks 4 and 5.

In Blocks 1, 2 and 4, the stimuli were presented on 20 trials. Each trial block began with instructions describing the category discrimination for the upcoming block and the assignment of response keys (left or right) to categories. Reminder labels were

appropriately positioned on the top left or right of the screen and remained there throughout the block. Each combined category discrimination task, as denoted by Blocks 3 and 5, consisted of 40 trials. All blocks were initiated by the participant. On each trial within Blocks 1,2 and 4, the stimulus word was visible until a response was made and was replaced by a blank background if answered correctly or the word 'error' if answered incorrectly. Again the participant was instructed to inform the experimenter after the phase was completed. If the white British participants implicitly evaluate the Asian stimuli negatively, White British names paired with positive words and Asian names paired with negative words (in-group positive block) will be responded to faster than white British names paired with negative words and Asian names paired with positive words (in-group negative block).

Demographic questions were also collected: gender, nationality (as an open-ended question) and ethnicity. The experiment was administered on a desktop computer in individual cubicles.

5.3.3 Procedure

On arrival, participants were greeted by a white British male experimenter, who was trained to run the study. Participants were told that the experiment involved social judgements and that different tasks were to be completed during the experiment. The experimental procedure consisted of three phases, each phase consisting of varying lengths of trial blocks and actual testing blocks.

Five participants were run simultaneously. Participants were first briefed together about the first phase, the explicit measure. They were told to read and follow the instructions presented to them on the computer screen carefully and to answer the items as honestly as possible. They were also informed that once they had proceeded to the next item, they could not go back and change their answers. Each participant was shown into a separate cubicle which contained only a desktop computer and a chair. To proceed with the experiment, they were told to press a key on the keyboard and to come out of their cubicles after the phase was completed, but only when the computer instructed them to do so.

Once all the participants being tested at the same time completed the initial phase, they were briefed together about the second phase (priming task), as for the first part. Again, they were told to follow the computer instructions carefully and to come out of their cubicles when instructed to. In addition, participants were told to answer as *accurately* and as *quickly* as possible. To proceed with this phase, participants were told to press a different key on the keyboard. The final part was the IAT phase. Again, the participants were told to press a different key on the keyboard to proceed.

The second and third phases of the experiment were counterbalanced so that half the participants received the priming task after the IAT and half received the IAT after the priming task.

5.4 Results

5.4.1 Data Reduction

The data for each trial block of the priming task included RTs³. Guidelines proposed by Greenwald, McGhee and Schwartz (1998) were followed to correct for anticipatory responses and momentary inattention. RTs greater than 3000ms and less than 300ms were recoded as 3000ms and 300ms respectively (less than 1 percent of RTs in total were recoded in this way). Due to their typically lengthened latencies, data from the first 2 trials were dropped. The remaining RTs were log-transformed to meet the distribution assumption for subsequent statistical analyses. The data did not include the practice block RTs. Data were also screened to exclude participants who exhibited an error rate of more than 25 percent or a mean RT of 2000ms. However, no participants exceeded those cut-offs.

As with the priming data, IAT RTs greater than 3000ms and less than 300ms were recoded as 3000ms and 300ms respectively. The first two trials in each block were dropped and the remaining RT data were log-transformed. In essence, the relevant IAT data consisted of logged RTs from Blocks 3 and 5 (the combined category tasks)

³ Error rates were also measured for the RT tasks. None of the present studies have described these analyses because they were consistently non-significant throughout the thesis.

of each condition. As with the priming data, no participant had an error rate of more than 25 percent or a mean latency greater than 2000ms.

The sample included 14 participants who did not specify their ethnicity. Importantly, these participants did not differ from the self-reported white British participants in terms of their explicit ratings, IAT effect RTs or priming RTs. Therefore these participants were retained in all subsequent analyses.

5.4.2 Analysis of the Explicit Stereotype Measure

Based on Study One's Asian and white British stereotypes, the 25 explicit measure items were a priori used to construct two ethnic stereotype scales. Twelve stereotype items were considered more typical for Asian children. These items were: quiet, passive, hardworking, well-behaved, obedient, domesticated, good at sciences, intelligent, encouraged by family, spoiled, disrespect women and attentive. These items constituted the Asian Stereotype Subscale-12 (AS-12).

Thirteen stereotypes were rated as more typical for white British children. These items were: unmotivated, disruptive, aggressive, disobedient, talkative, spiteful, athletic, like sports, good at humanities, overactive, temper tantrums, fidgety and inattentive. These items consequently constituted the white British Stereotype Subscale-13 (WS-13).

Scale reliability was calculated by submitting all the scale items per target group independently to Cohen's alpha reliability formula. The AS-12, had a mean reliability of 0.76 for the four target groups (Asian girls, Asian boys, white-British girls and white-British boys). The other subscale, named the WS-13, had a mean reliability of 0.86 (Table 6).

Table 6 – Alpha reliabilities for each ethnic group on Explicit Stereotype measure (N=54)

	AS-12	WS-13
Asian girls	0.72	0.79
Asian boys	0.62	0.77
White British girls	0.66	0.81
White British boys	0.59	0.85
Asian children	0.78	0.83
White British children	0.74	0.89

Reliability increased over the groups when they were collapsed over gender, as shown in Table 7. A high score on both subscales indicated explicit stereotypes in the direction of the subscale's ethnicity. That is, a high score on the Asian stereotype subscale indicates explicit stereotypes of Asian-congruent stereotypes. Table 7 shows the mean scores of the two subscales for both ethnic groups.

Table 7 – Mean ratings (SD) of each subscale over both target ethnic groups (N=54)

	AS-12	WS-13
Asians	4.44 (0.58)	3.99 (0.44)
White British	3.31 (0.51)	4.23 (0.59)

A 2(scale: AS-12 vs WS-13) x 2(target ethnicity: Asian children vs white British children) within subject ANOVA was conducted on the mean ratings. A main effect of scale was found, $F_{(1,53)}=24.49$, $p<.001$, where the AS-12 scale had lower ratings than the WS-13. There was also a main effect of target ethnicity, $F_{(1,53)}=64.28$, $p<.001$, where Asian children had higher ratings than white British children. There was a significant interaction, $F_{(1,53)}=81.32$, $p<.001$.

Post-hoc t-tests for each level of the scale variable indicated that on the AS-12, Asian children were rated significantly higher than white British children, $t(53)=11.02$, $p<.001$. When the scale was the WS-13, white British children were rated significantly higher than their Asian counterparts, $t(53)=-2.77$, $p<.01$. T-tests for each level of the target ethnicity variable indicated that the Asian group ratings were significantly higher on the AS-12 than the WS-13, $t(53)$, 4.64, $p<.001$. When the

target ethnicity was white British children, participants rated them significantly higher on the WS-13 than the AS-12, $t(53)=11.22$, $p<.001$.

The Asian children ratings were significantly higher than the theoretical midpoint of 4 on the AS-12, $t(53)=5.68$, $p<.001$ and significantly lower than the midpoint on the WS-13, $t(53)=9.97$, $p<.001$. White British children ratings were significantly higher than the midpoint on the WS-13 scale, $t(53)=2.87$, $p<.01$, but not on the AS-12 scale, $t(53)=-0.12$, ns.

To summarise, for the AS-12, the Asian ethnic group was rated significantly higher than the white British group. Ratings of Asian children indicated that Asians were perceived to behave in a stereotypically Asian manner. Ratings of white British children did not particularly indicate that white British children were perceived to behave according to white British stereotypes. For the WS-13, the white British groups were rated significantly higher than the Asian groups. Figure 1 summarises the explicit measure findings.

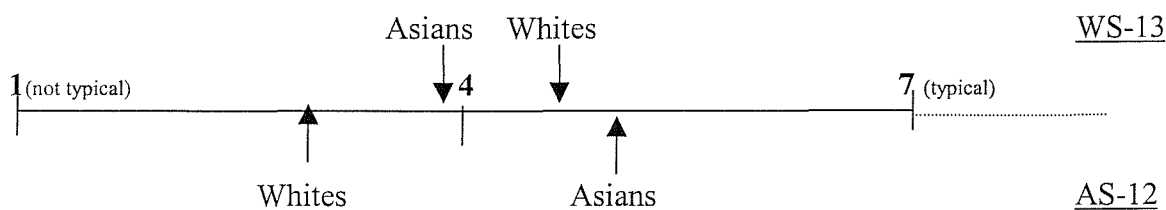


Figure 1 – Subscale means in relation to target ethnicity

5.4.3 Analysis of the Priming Task

It was predicted that participants would categorise ethnic names faster when preceded by stereotype-congruent words than when these were preceded by stereotype-incongruent words.

The data for this phase consisted of the response latency to categorise Asian and white British names after masked ethnic stereotype-congruent or incongruent words were subliminally presented to the participants. Therefore, latencies for both ethnic groups

following stereotype-congruent words and stereotype-incongruent words were acquired. Table 8 illustrates the latencies for each of the categories.

Table 8 – Mean raw latencies (SD) of categorising ethnic names following stereotype primes (N=54)

	Asian congruent primes	White congruent primes
Asian name stimuli – ms	571.21 (70.43)	561.90 (61.21)
White name stimuli – ms	562.48 (58.19)	577.01 (82.79)

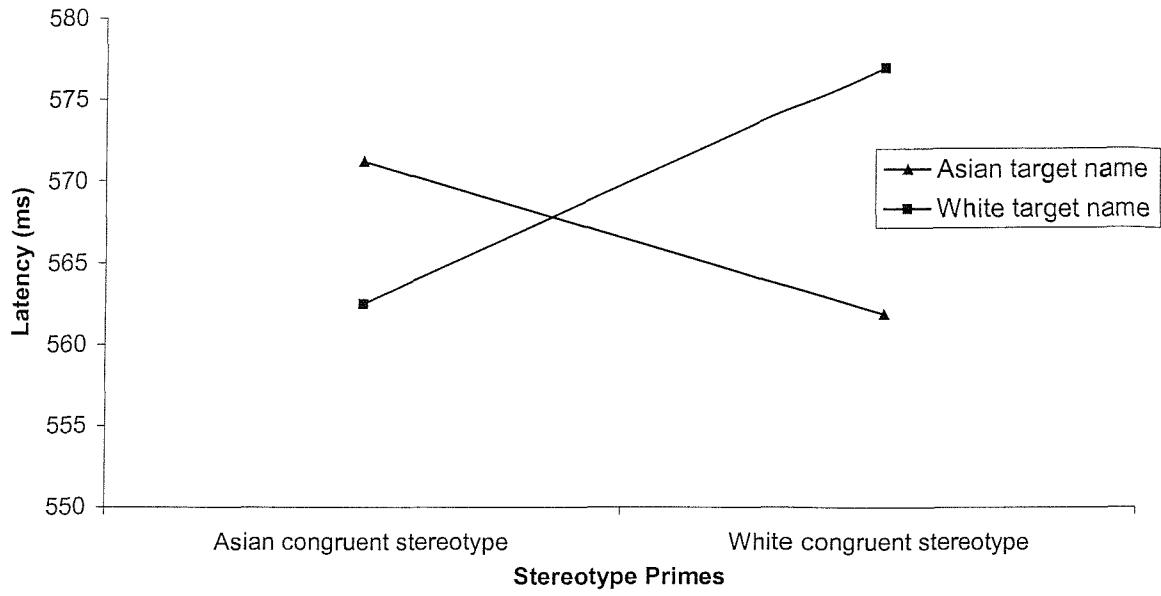


Figure 2 – Mean raw latencies of categorising ethnic name following ethnically congruent stereotype primes (N=54)

The logged latencies for each combination of ethnicity and stereotype were submitted to a 2(target name ethnicity: Asian vs white British) x 2(stereotype prime: Asian stereotype word vs white British stereotype word) within subjects ANOVA. There were no main effects of target name ethnicity or stereotype prime, but there was a significant interaction, $F_{(1,52)}=5.21, p<.03$. This interaction is illustrated in Figure 2.

To investigate the interaction between target name ethnicity and stereotype prime, a series of t-tests were performed. Paired samples t-tests for each level of target name ethnicity showed that white British names were categorised faster when they were preceded by stereotypical Asian words (e.g. hardworking) than when they were preceded by stereotypical white British words (e.g. loud), $t(53)=2.36, p<.03$. Asian names were not categorised significantly faster when they were preceded by stereotypical Asian words than when they were preceded by stereotypical white British words, $t(53)=-1.42, ns$.

T-tests for each level of stereotype prime showed that participants did not categorise Asian stereotype words preceding white British names significantly faster than when preceding Asian names, $t(53)=1.13, ns$. White British stereotype words preceding white British names were also not categorised significantly faster than when preceding Asian names, $t(53)=1.29, ns$. In sum, these findings suggest that both ethnic group names were responded to faster after the priming of incongruent stereotype words than congruent stereotype words (Figure 2).

In accordance with Greenwald, McGhee and Schwartz's (1998) IAT effect calculation, an index of implicit stereotyping was created:

$$\left\{ \begin{array}{l} \text{Asian/incongruent} + \\ \text{white British/incongruent} \end{array} \right\} - \left\{ \begin{array}{l} \text{Asian/congruent} + \\ \text{white British names/congruent} \end{array} \right\}$$

The final score reflects the extent to which activation of stereotypical beliefs facilitates the responses to congruent ethnic stereotypes. If the overall latency calculation is a positive number, then this indicates implicit stereotyping; if the final figure is negative, then this does not suggest implicit stereotyping. The final mean

latency for this measure was -23.84ms. This latency was also significantly different from 0, $t(53)=2.28$ $p<.05$, indicating that implicit stereotyping was not occurring.

5.4.4 Analysis of the IAT

As the participants were white British, it was hypothesised that, relative to unpleasant words, pleasant words will be more strongly associated with white British names than with Asian names. That is, white British names paired with positive words and Asian names paired with negative words (in-group positive block) will be responded to faster than white British names paired with negative words and Asian names paired with positive words (in-group negative block).

Figure 3 presents the raw latencies for each of the combined categorisation tasks. The expectation was that the RTs would be slower for the in-group negative block than the in-group positive block. A paired samples t-test of the logged latencies indicated that the two blocks were indeed significantly different, $t(53)=11.86$, $p<.001$.

The IAT effect is calculated as the difference in latencies between the in-group positive and in-group negative blocks (each block being the sum of the components described above). Figure 3 shows that the averaged IAT effect was +261.69ms. Response times were shorter when white British names were paired with pleasant words (and Asians with unpleasant words) than when white British names were paired with unpleasant words (and Asian names with pleasant words). This suggests that white British participants more strongly associate pleasantness, relative to unpleasantness, with their own group than with the Asian group.

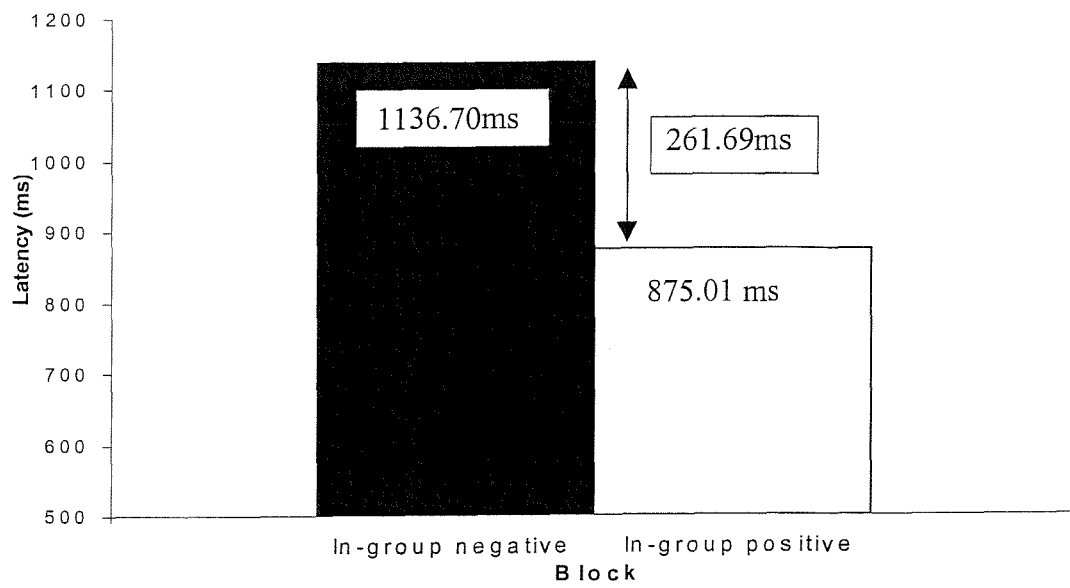


Figure 3 – IAT effect (N=54)

5.4.4.1 Did the Familiarity of the Names Affect the Latencies?

A criticism of the IAT is that the familiarity of the names may significantly affect the IAT latency effect. The familiarity of the names was not tested prior to the design of the IAT, but according to Zajonc's (1968) theory of familiarity, the more familiar one is with a stimulus the faster one would attend to that stimulus. Therefore, participants may have evidenced an implicit association between white British names and pleasantness because they are more familiar with white British names than Asian names. One way of testing whether participants were more familiar with white British names than Asian names is to analyse the name categorisation phases of the IAT. If participants are more familiar with white British names than Asian names, one would expect them to categorise white British names faster than Asian names. In the name categorisation phases of the IAT, there was no evidence for this, $F_{(3, 2094)}=1.58$, ns, even when the name labels switched key assignments (in Block 4), $F_{(3, 2094)}=1.76$, ns.

5.4.4.2 Counterbalancing Procedure.

The IAT block orders were counterbalanced, where the in-group positive block was presented to half the participants first and the in-group negative block was presented to the remaining participants first. According to Rothermund and Wentura (2001), it is typical to find an order effect with IAT where the presentation of the in-group positive block first increases the IAT effect score. To test for an order effect in the present data, a t-test was used with the logged IAT effect when the in-group positive block was presented first ($M=0.27$ $SD=0.15$) and when the in-group negative block was presented first ($M=0.19$ $SD=0.14$), $t(53)=1.95$, $p=0.06$. The effect was marginally significant, indicating that, descriptively, presenting the in-group positive block first led to a larger IAT effect.

The IAT and the priming task were also counterbalanced so that one was performed first for half the participants and the other first for the other half of the participants. The magnitude of the IAT effect was not influenced by task order, $t(53)=1.43$, ns.

5.4.5 Correlation Analyses

As mentioned in Chapter Two, there is debate regarding the relationship between implicit and explicit measures. Some researchers have found a relationship between the two different types of measure (e.g. Kawakami et al., 1998) while others have not (e.g. Devine, 1989). In order to explore the relationship between implicit and explicit measures in the present data, the measures were correlated against one another. Although the priming task and the explicit measures seemed to produce interesting results independently of each other, these measures were not correlated well (Table 9). The implicit measures did not correlate with each other or with the explicit measure. This finding is consistent with the idea that these measures assess separate aspects of ethnic stereotypes.

Table 9 – Correlations of the Explicit Stereotype measure, the priming measure and the IAT

	1	2	3	4	5
1. AS-12 – Asians	<i>0.80</i>				
2. AS-12 – Whites	-0.07	<i>0.76</i>			
3. WS-13 – Asians	-0.12	0.44**	<i>0.81</i>		
4. WS-13 – Whites	0.46**	0.03	0.34*	<i>0.85</i>	
5. IAT (logged)	-0.07	-0.03	-0.04	-0.01	-
6. Priming index	-0.06	0.01	-0.08	-0.21	-0.01

* $p < .05$

** $p < .01$

5.4.6 Summary of Results

Participants personally endorsed positive, well-mannered behaviours, as more stereotypical for Asian children than for white British children. On the other hand, negative, more disruptive behaviours, were perceived as more stereotypical for white British children. According to the priming index, implicit stereotyping was not found by the priming measure. However, white British names were associated more automatically with Asian stereotype words than white British stereotype words. The IAT effect also showed a bias against Asians, where negative words were associated

with Asian more than white British stimuli and positive words were associated with white British more than Asian stimuli.

5.5 Discussion

There are three main findings from the study. First, participants rated the typical behaviours of Asian girls, Asian boys, white British girls and white British boys differentially on the explicit subscales. The first hypothesis stated that the explicit measures would not yield significantly different ratings for the four target groups because participants were likely to demonstrate an egalitarian viewpoint. However, analyses to answer this first hypothesis indicated that participants held positive explicit stereotypes of Asian children and negative explicit stereotypes of white British children.

Secondly, for the priming measure, participants categorised ethnic names faster when followed by incongruent stereotype words than by congruent stereotype words, i.e. Asian names were responded to faster following white British stereotype words and white British names were responded to faster following Asian stereotype words. The findings were contrary to the hypothesis. The priming measure index did not indicate implicit stereotypes as the mean latency was significantly less than '0', suggesting implicit stereotypes were not detected.

Finally, participants were faster at categorising Asian names when paired with unpleasant words and white British names when paired with pleasant words than white British names when paired with pleasant words and Asian names when paired with pleasant words. As the IAT effect latency produced a positive number, the participants held implicit stereotypes in favour of white British people and against Asian people. The final hypothesis was supported because participants were implicitly positive biased toward white British people and implicitly negatively biased against Asian people.

In essence, the findings demonstrate that Asian children were explicitly rated higher on the positive items than white British children, but on the implicit measures, they

were associated more with negative stimuli. This is interesting because the findings appear consistent with the literature on the development of implicit stereotype research. Implicit social cognition research purports that in modern society people are concerned with promoting an unbiased opinion toward social groups. They are therefore unlikely to explicitly endorse differences between different social groups (e.g. McConahay, 1986). However, this does not necessarily mean they do not hold biased cognitions about social groups. The identification of implicit associations through RT tasks can reveal unconscious links that people have about social groups that can influence their behaviour to show biased cognition. The present data suggests that people associate negative or unpleasant words with Asian names (and positive and pleasant words with white British names), despite explicitly associating Asian names with positive words (and white British names with negative words). In other words, the data suggest that people are editing their explicit responses to be more favourable toward the Asians, but their automatic, unedited responses show an unfavourable implicit association with Asians.

The priming task indicated that stereotyped words were not responded to in the hypothesised way. Participants associated ethnic names and incongruent stereotype words faster than the congruent stereotype words. However, as mentioned above, the stereotypes that were considered congruent for the Asian children were almost entirely positive, whereas the stereotypes considered congruent for the white British children were almost entirely negative. These stereotypes were identified in the first study as being widely-held stereotypes of these two social groups and, hence, they were used in the priming task. As mentioned in Chapter 3, Gaertner and McLaughlin (1986) conducted a similar study to this using negative words to describe Black people and positive words to describe White people. They found a bias in their results, where 'White' and positive words were responded to faster than 'Black' and positive words, but negative words were not responded to any faster with 'Black' than 'White'. However, Dovidio, Evans and Tyler (1986) criticised McLaughlin and Gaertner's work for excluding an evaluative component of racial stereotypes in their measure. For example, McConahay and Hough (1976) suggested that the evaluative component of social stereotypes, although typically linked with cognitive components, can influence behaviour in ways that are independent of the cognitive component. Gaertner and McLaughlin used stimuli that did not differentiate between

these two elements of racial attitudes, such that stereotyped words associated with Whites (e.g. smart, ambitious) were *only* positive and the stereotyped words associated with Blacks (e.g. stupid, lazy) were *only* negative. Thus, Gaertner and McLaughlin's research does not provide clear evidence for this theoretical distinction.

The same criticism can be levelled against the present study. Like Gaertner and McLaughlin, exclusively positive words were used for the Asians and negative words for the white British. Gaertner and McLaughlin used stereotypes for Blacks that were of a negative nature and stereotypes for Whites that were of a positive nature and found that their predictions held. The prediction for this part of the study did not hold, suggesting that the evaluative component of the stimuli was activated, as opposed to the cognitive component. Unlike Gaertner and McLaughlin, the stimuli used originated from a previous study specifically investigating children's behavioural differences. Only those characteristics that were statistically different were chosen to represent stereotypes of the target ethnic groups. The reason why in the present study negative stereotypes were not used for Asians and positive stereotypes were not used for Whites is because it was difficult to identify such stereotypes from those that were generated from Study One.

However, it is possible to understand the findings of the priming measure in terms of evaluative stereotypes. To be precise, it is possible to think that the priming task activated the implicit evaluative beliefs, rather than the implicit cognitive beliefs. The stimuli used were stereotypes of the respective social groups (as identified by Study One and supported by Study Two's explicit measure analysis) and thus can be assumed to have associations with the target groups. However, analyses indicated that white British names were responded to faster following incongruent stereotype primes (which were also positively valenced) than congruent stereotype primes (which were negatively valenced) and Asian names were responded to faster following incongruent (negative) stereotype primes than congruent (positive) stereotype primes. That is, the evaluative component of the stimuli had a greater impact on response than the cognitive component. Stereotypes about Asian and white British target groups appear to be related to the valence component more than the semantic component. As Dovidio and Gaertner (1993) stated, stereotypes are stored in memory according to their content information and evaluative content. The

priming task identified evaluative associations more than cognitive associations. In line with this interpretation, it is necessary to modify this priming measure to include both positive and negative stereotypes to eliminate any confounding by stereotype valence. This shall be the aim of the next study.

Implicit stereotypes were detected by the IAT. As stated in Chapter Three, the IAT is a recently devised measure and has been considered as the most useful implicit cognition tool to date (Rudman et al., 1999). Although the IAT hypothesis was supported, there are some points that may have contributed to the IAT effect. For example, according to Zajonc's (1968) theory, the more familiar one is with a stimulus, the faster the response. Analyses did not indicate that the familiarity of British versus Asian names contributed to the reaction times, or IAT effect. In addition, Rothermund and Wentura (2001) believed that the IAT exhibits order effects and that this would affect the IAT effect (and would possibly cast doubt on whether bias is found). Analyses of this data using the IAT effects from the two different versions of the measure did not support such an order effect. Finally, as Greenwald, McGhee and Schwartz (1998) suggested, the participants should be controlled for the level of exposure with their in-group cultures. In the case of this study, all participants were British-born British people and therefore it was assumed that such a control was unnecessary. Overall, the IAT can be said to detect bias and is a useful tool for this purpose.

5.6 Chapter Summary

Explicit and implicit stereotypes may explain why Asian children are over-rated with behaviour problems in that they provide a basis on which to make judgements. Study One explored this possibility and found that Asians were stereotyped positively and white British children were stereotyped negatively. Using the findings from Study One, explicit and implicit stereotype measures were devised. In addition, a measure of implicit evaluative stereotypes (IAT) was employed to explore the possibility of unconscious stereotypes playing a role in this 'hidden bias' phenomenon. Explicitly Asians were rated more positively, implicitly they were rated more negatively than white British children. These findings suggest that evaluative stereotypes are evident on an implicit level. Due to the potential confound in stereotype word valence of the

priming measure, the next study aims to address this by including positive and negative words for both target groups. It will also expand the use of the measures in a South Asian participant group.

CHAPTER SIX

Study Three

6.1 Chapter Overview

The aim of this chapter was to extend the analysis of stereotypes of Asian children presented in Study Two. This was achieved in two ways. First, the priming task was modified in order to remove the confound between semantic meaning and evaluative content of the traits used. Second, both Asian and white British ethnic groups participated so that the ethnic specificity of the in-group bias found in Study Two could be explored. The results suggested that on the priming task participants from both ethnic groups implicitly associated the evaluative content of the stereotypes, rather than the ethnic applicability of the trait, with the target groups. Asian names were associated with negative traits and white British names were associated with positive traits. The IAT gave a different picture with a positive in-group bias found among the white British participants, but no bias toward any target group among the Asian participants. In contrast, participants from neither ethnic group explicitly stereotyped the target groups. In summary, Asian people did not tend to stereotype either implicitly or explicitly while white British people stereotyped implicitly (showing a positive in-group bias), but not explicitly. The findings for the white British participants were consistent with previous research, as well as with the findings from Study Two.

6.2 Introduction

The study reported in the present chapter has two main aims: To modify the priming task and to extend the investigation of stereotypes into a South Asian population. First, it aimed to modify the priming measure to identify implicit stereotypes. In Study Two, it appeared that the stereotype words elicited evaluative associations and not cognitive associations with the target groups. It is important to note that this finding may have occurred because the ethnic stereotype words used were either all positive for Asian targets or all negative for white British targets. Neither group therefore had stereotype words that were both positive and negative. Based on

Dovidio, Evans and Tyler's (1986) criticism of Gaertner and McLaughlin's (1983) work, there is a need to examine both congruent positive and negative stereotypes relating to both ethnic groups in order to determine whether the ethnicity/word associations obtained were due to the semantic or evaluative content of the words.

In Study Two, the target stimuli were ethnic names and participants were asked to categorise these names into their respective ethnic groups after the subliminal presentation of stereotype word primes. In the present study, the ethnic names will be used as primes and the stereotype words will be used as target stimuli. This is beneficial from a methodological viewpoint because the stereotype words were too long to remain unnoticed on a subliminal level. Thus, in the present study, participants will be subliminally presented with an ethnic name prime followed by a target stereotype word. Participants will classify the stereotype words as either 'positive' or 'negative'. This is now possible because each target group's stereotype words fall under one of these two evaluative categories. In essence, the present study is a modified version of Study Two. Although the explicit measure and IAT were exactly the same as in Study Two, the priming measure has been amended to include both positive and negative stereotypes of Asian and white British children.

The second aim of this study is to explore ethnic biases of Asians. In Study Two, there were only white British participants because the rating bias indicated in Chapter One focused on White people. Whites typically associated negative words with Asian names and positive words with in-group names. Race relationships between Asian and white British ethnic groups are subject to the beliefs and behaviours of both Asian and white British towards each other. Thus far, the beliefs and behaviours of white British people have been the focus of the present research. In order to further explore the range of beliefs and behaviours that may contribute to race conflict interactions (such as those in Burnley, Bradford and Oldham in 2001 between Asian and white British people), the beliefs held by Asian people should also be investigated. Previous research suggests that Asian participants will show similar preferences with respect to their own in-group as white British people because the tendency to favour in-group members is extremely robust and present in most, if not all, cultures (Boulton & Smith, 1992). Also, minorities still detect negative stereotypes from Whites (Niemann, O'Connor & McClorie, 1998), less equitable treatment from White

university teaching staff (Ancis, Sedlacek & Mohr, 2000) and health services (Ali et al., 2001). These forms of unfavourable treatment are likely to create negative evaluations of White out-group members. One would expect both Asian and white British participants to show a positive in-group bias. In other words, on the IAT and priming tasks, Asian participants are expected to faster respond to positive words when combined with Asian names than to positive words when combined with white British names.

The predictions were:

- 1) Priming task: Both participant groups will display an implicit in-group bias on the priming task. Positive words preceded by in-group names and negative words preceded by out-group names will be responded to faster than negative words preceded by in-group names and positive words preceded by out-group names, regardless of the ethnic congruency of the stereotype word;
- 2) Explicit Stereotype measure: Both participant groups will explicitly rate the white British and Asian target groups differently: white British target groups will be rated higher on the WS-13 and Asian target groups will be rated higher on the AS-12;
- 3) IAT: Both participant groups will display an implicit in-group bias on the IAT. In-group names paired with positive words and out-group names paired with negative words (in-group positive block) will be responded to faster than in-group names paired with negative words and out-group names paired with positive words (in-group negative block).

6.3 Method

6.3.1 Participants

One hundred and fifty-two people (83 white British and 69 South Asian) participated in the study. All participants were offered £5 as an incentive to participate. Of the white British participants, 40 were male and 43 were female. All were British nationals, predominantly raised in the UK, and 68 were university students and 15

were non-students. The mean age of the white British participants was 24.46 years (range from 18 to 37 years).

Of the South Asian participants, 30 were male and 39 were female. The majority of Asian participants were raised in the UK, 18 reported being raised in the Indian subcontinent and 6 elsewhere (however, the data collected from these 24 participants were not significantly different from the Asian participants raised in UK).

Forty-five participants were British nationals, 21 reported Indian nationality, and 3 reported 'other' nationality. Fifty-six of the Asian participants were university students and 13 non-students. The mean age of Asian participants was 24.81 years (range from 18 to 61 years).

The ethnic groups were categorised as white British (n=83) and Asian (n=69)³.

6.3.2 Materials

Study Two's Explicit Stereotype measure (Phase 1) and IAT measure (Phase 3) were used in the present study.

PHASE 2 - Priming task. This task had a similar design to that of the priming task in Study Two, with only a few differences. This time the stimuli consisted of words that were presented as category primes (ethnic names) or target words (stereotype words). The target words were two positive and two negative stereotypes congruent with the white British ethnic groups and two positive and two negative stereotypes congruent with the South Asian ethnic groups. These were obtained from the 20 prevalent behavioural stereotypes⁴ identified in Studies One and Two. These 20 behaviours were coded by two independent raters into the Big Five domains of personality (Extroversion, Agreeableness, Conscientiousness, Neuroticism and

³ As there were no differences in explicit ratings or implicit RTs between those Asians who reported to be raised in the UK and other Asians in any of the measures, the Asian group therefore consisted of all the participants who reported their ethnicity to be South Asian, regardless of the culture in which they were raised.

⁴ In keeping with the general aim of the thesis which is to explore the use of behavioural stereotypes in judgements, only stereotypes relating to behaviour were included in this pilot experiment. Therefore, prevalent stereotypes unrelated to behaviour, e.g. 'good at humanities', were not included.

Openness to experience; Costa and Macrae, 1985). Cohen’s kappa measurement of agreement showed significant and strong associations (range from .75 to 1.00; mean kappa=.91, $p<.001$). These behaviours are summarised in Table 10. Due to the limited number of stereotypes in the Openness and Neuroticism domains, the focus fell on the Extroversion, Agreeableness and Conscientiousness domains. It was noticed that the Extroversion dimension included white positive stereotypes (e.g. extroverted) and Asian negative stereotypes (e.g. passive). In addition, the Agreeableness dimension was indicative of positive Asian stereotypes (e.g. kind) and negative White stereotypes (e.g. disobedient). The Conscientiousness domain contained traits positive Asian stereotypes (e.g. hard working and intelligent) and negative White stereotypes (e.g. unmotivated).

Table 10 – Stereotypes deemed positive and negative for the two target groups and their Big Five domain assignments

	Extroversion	Agreeable.	Conscientious.	Neurotic.	Openness
Asian	Quiet Passive*	Well behaved Kind Obedient Disrespect women*	Hardworking Intelligent Attentive		
White	Talkative* Extroverted	Disobedient* Aggressive* Bully others* Spiteful* Inattentive* Fidgety* Disruptive*	Unmotivated*	Overactive* Temper tantrums*	

* negative stereotypes

Using papers by Blanchard et al. (1994) and Trapnell and Wiggins (1990), additional words that also fell under the three prevalent personality domains were found. These words were also congruent for the target groups (but not significantly different to other target groups) based on Studies One and Two. The stereotype traits included were associated to extroversion because they were congruent with positive White stereotypes (assertive, sociable and confident) and congruent with negative Asian stereotypes (loner, meek and timid). Congruent Asian stereotypes generated under the agreeableness domains were ‘warm’, with the White opposites as ‘cold’ and ‘mean’. The conscientious domain included the negative White stereotypes of ‘careless’,

'lazy' and 'stupid' (see Table 11). The level of agreement for the categorisation of these new words by two independent raters was strong and significant (mean kappa=.71, range from .59 to .92, $p < .01$)

Table 11 – Words used in the pilot questionnaire (N=35)

Extroversion		Agreeableness		Conscientiousness	
<i>White positive</i>	<i>Asian negative</i>	<i>Asian positive</i>	<i>White negative</i>	<i>Asian positive</i>	<i>White negative</i>
Assertive	Meek	Warm	Cold	Hardworking	Lazy
Confident	Timid	Kind	Mean	Clever	Stupid
Outgoing	Loner	Obedient	Disruptive	Attentive	Careless

The 18 words were then developed into a pilot questionnaire (see Appendix F) which was completed by 35 participants. Participants were first asked to report the typicality of the traits for white British and South Asian children separately on a 7-point scale, where '1' indicated 'very atypical' and '7' indicated 'very typical'. The participants were asked to complete this section according to existing public ethnic stereotypes. Secondly, the participants had to indicate the valence of each words on a 7-point scale, where '1' was 'very negative' and '7' was 'very positive'. The questionnaire was designed to provide prevalent positive and negative stereotypes of equal valence for both ethnic target groups. T-tests indicated that the stereotypes 'hardworking', 'meek', 'clever', 'timid', 'obedient' and 'attentive' were considered more typical of Asian children than of white British children. The stereotypes 'stupid', 'confident', 'mean', 'assertive', 'disruptive', 'lazy', 'outgoing' and 'careless' were considered typical of white British children than Asian children. Figure 4 shows these 14 stereotypes along a 7-point line scale, which denotes the valence of each stereotype. Stereotypes that were considered typical of Asian children were plotted below the horizontal valence line and stereotypes that were considered typical of white British children were plotted above the valence line.

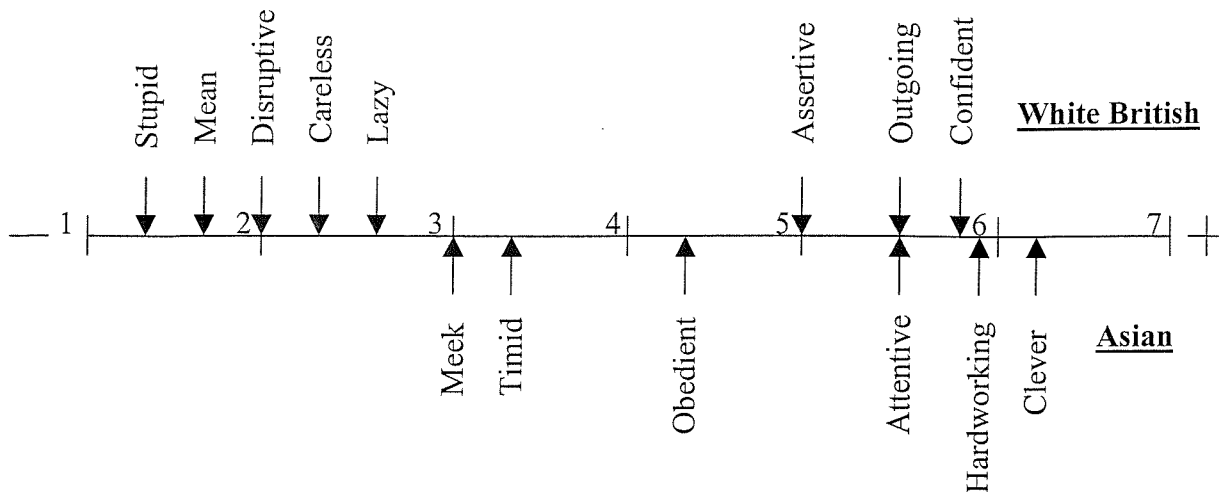


Figure 4 – Summary of ethnicity and valence effects of the 14 stereotypes

Of the positive stereotypes only four matched on valence: ‘attentive’ and ‘hardworking’ (Asian stereotypes) were rated as equally positive as the traits ‘outgoing’ and ‘confident’ (White stereotypes). Of the negative stereotypes, neither of the Asian stereotypes (meek or timid) matched any of the five white British stereotypes (stupid, mean, disruptive, careless and lazy). Therefore, the two white British stereotypes most closely matched in terms of negative valence were chosen. These were ‘lazy’ and ‘careless’.

Thus, stereotype words that were seen as equally typical for Whites and Asians from a statistical point of view, and were as equal as possible in positive/negative valence, were consequently chosen as stimuli for the priming task. The eight target stereotype words were: meek, timid (Asian negative stereotypes), attentive, hardworking (Asian positive stereotypes), careless, lazy (white British negative stereotypes), outgoing and confident (white British positive stereotypes).

Following the same priming task presentation settings in Study Two, the ethnic names were masked between two strings of letters, followed immediately with one of the eight stereotypes. The participants were then instructed to categorise the stereotype as either ‘positive’ or ‘negative’.

In addition to obtaining appropriate target words, the pilot questionnaire also rated the familiarity and prominence of various names for Asian and white British children.

The most familiar and prominent names for Asian children were ‘Raj’, ‘Sanjay’, ‘Narinder’ and ‘Gita’. The closest matched familiar and prominent white British names were ‘John’, ‘Edward’, ‘Jane’ and ‘Helen’. These names were used as primes in the priming task and the IAT.

Demographic questions assessed gender, age, whether the participant is a student (if so, in which department), nationality, ethnicity and which country the participant was raised in. The experiment was administered on desktop computers in individual cubicles.

6.3.3 Procedure

The procedure was exactly the same as for Study Two, except, this time, the experimenter was an Asian female.

6.4 Results

6.4.1 Data Reduction

The data for both RT tasks were treated in the same way as in Study Two.

6.4.2 Analysis of the Priming Task

It was predicted that participants would be faster at responding to positive words preceded by in-group names and negative words preceded by out-group names than negative words preceded by in-group names and positive words preceded by out-group names. That is, for the Asian participants, ‘attentive’ preceded by ‘Gita’ would be responded to faster than if preceded by ‘John’. For the white British participants, ‘attentive’ preceded by ‘John’ would be responded to faster than if preceded by ‘Gita’. The ethnic congruency of the stereotype word would not influence the categorisation latencies.

The data for this phase consisted of the RT to categorise positive and negative words found to be stereotypical of Asian and white British people after masked ethnic name primes. This resulted in eight different conditions (Asian name/positive Asian word, Asian name/negative Asian word, Asian name/positive White word, Asian name/negative White word. The remaining four combinations were the same but with white British name primes). Table 12 shows the mean response latencies by participant group.

Table 12 – Mean raw latencies (SD) for the eight different word and prime combinations by participant group

	Asian name prime				White name prime			
	Positive Asian word	Negative Asian word	Positive White word	Negative White word	Positive Asian word	Negative Asian word	Positive White word	Negative White word
White group (N=83)	633.61 (126.78)	632.22 (239.20)	647.75 (137.16)	607.88 (140.55)	621.44 (112.55)	639.34 (132.07)	634.35 (134.47)	651.80 (153.92)
Asian group (N=69)	652.71 (117.67)	614.44 (93.54)	648.80 (111.68)	623.98 (98.43)	629.91 (108.68)	655.15 (105.51)	649.14 (122.94)	651.45 (98.80)

A 2(target word valence: positive vs negative) x 2(target word ethnicity: Asians vs White) x 2(prime ethnicity: Asian name vs White name) repeated measures ANOVA with participant ethnicity as a between-subjects factor was used to analyse the data. Findings indicated a main effect of prime ethnicity, $F_{(1,150)}=4.69$, $p<.03$ indicating that participants categorised words faster when the prime was an Asian name than when it was a white British name. A number of significant interactions also emerged⁵. The finding of principal interest was the significant two-way interaction between target word valence (positive or negative) and prime ethnicity (Asian name or white British name), $F_{(1,150)}=28.55$, $p<.001$.

Post-hoc t-tests for each level of the prime word valence variable indicated that when the prime was a positive word, participants categorised White names faster than Asian names, $t(151)=3.63$, $p<.001$. When the prime was a negative word, participants categorised Asian names faster than White names, $t(151)=6.67$, $p<.001$. T-tests for each level of target name ethnicity variable showed that participants categorised Asian names preceded by positive words significantly faster than Asian names preceded by negative words, $t(151)=3.46$, $p<.001$. Participants also categorised White names preceded by positive words significantly faster than White names preceded by negative words, $t(151)=-3.11$, $p<.002$. These findings are consistent with the possibility that positive attributes are more strongly associated with white British people than with Asian people. Analysis of this interaction also suggests that negative words preceded by Asian names were categorised the fastest. This is shown in Figure 5 below.

⁵ Other interactions included a four-way interaction between participant ethnicity, target word valence, prime ethnicity and target word valence, $F_{(1,150)}=7.45$, $p<.01$. Decomposition of this interaction suggested that white British participants categorised White words preceded by White names faster than any other name/word combination. Asian participants responded to positive Asian words preceded by White names and negative Asian words preceded by Asian names faster than any other combination.

A marginally significant two-way interaction between target word ethnicity and target word valence occurred, $F_{(1,150)}=3.69$, $p<.06$. Decomposition of this interaction suggested that negative Asian words preceded by Asian primes were categorised particularly fast.

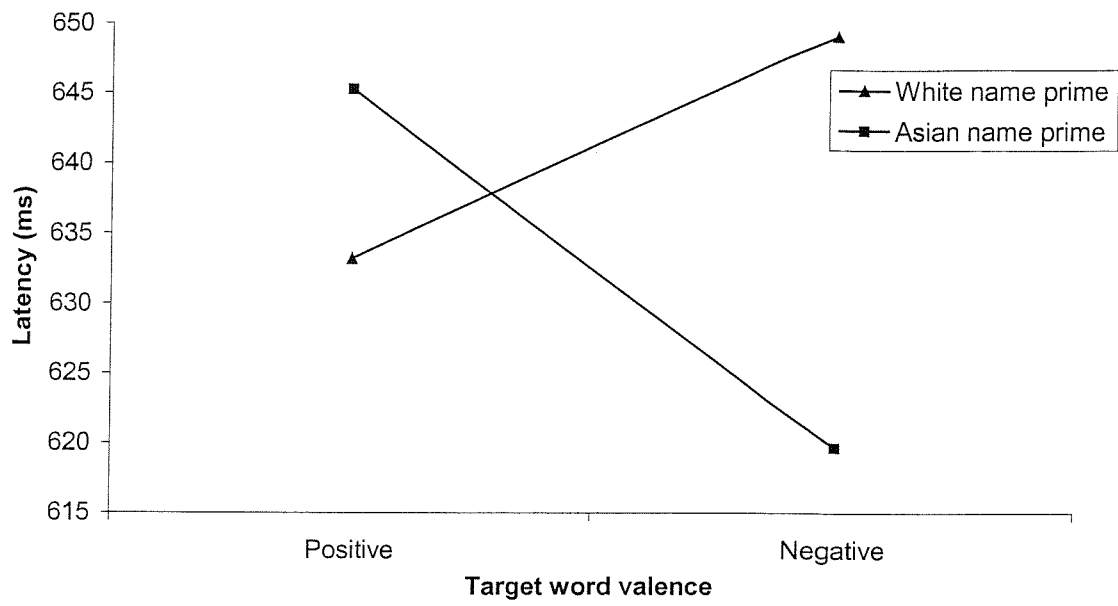


Figure 5 – Word valence x prime ethnicity interaction (N=152)

An evaluative stereotype index was calculated for both Asian and white British participants. For white British participants this was accomplished by subtracting the average RT for the conditions in which positive words were preceded by white British names and negative words were preceded by Asian names from the average RT for the conditions in which negative words were preceded by white British names and positive words were preceded by Asian names. Positive values on this index indicate the presence of evaluative bias. This Evaluative Stereotype Index is in fact analogous to the prime ethnicity by target word valence interaction for white British participants.

For Asian participants, the Evaluative Stereotype Index was calculated by subtracting the average RT for the condition in which positive words were preceded by Asian names and negative words were preceded by white British names from the average RT for the conditions in which negative words were preceded by Asian names and positive words were preceded by white British names. As before, positive values indicate the presence of evaluative bias. Again, this Evaluative Stereotype Index is analogous to the prime ethnicity by target word valence interaction for Asian participants.

The Evaluative Stereotypes Index for the white British participants was +76.61ms and for the Asian participants was -90.62ms. A t-test indicated that both indices were significantly different to one another, $t(150)=5.34$, $p<.001$. One-sample t-tests indicated that the index for white British participants was significantly greater than '0', $t(82)=3.14$, $p<.001$ and the index for Asian participants was significantly lower than '0', $t(68)=5.10$, $p<.001$. In other words, both participant groups showed implicit evaluative stereotypes in favour of white British people.

For the sake of interest, a Cognitive Stereotype Index was also calculated. This time, the sum of the four congruent combinations (Asian names/positive Asian words, Asian names/negative Asian words, White names/positive White words, White names/negative White words) are subtracted from the sum of the four incongruent combinations (Asian names/positive White words, Asian names/negative White words, White names/positive Asian words, White names/negative Asian words). The Cognitive Stereotype Index is in fact analogous with the prime ethnicity by target word ethnicity interaction. As above, a positive score would indicate bias in the

direction of stereotyping and a negative score would show a bias contrary to stereotyping. The Cognitive Stereotypes Index for the white British participants was -35.56 ms and for the Asian participants was -9.90 ms. A t-test indicated that the indices were not significantly different for Asian participants than for white British participants, $t(151)=0.99$, ns. One-sample t-tests indicated that neither the white British participants' index, $t(82)=-1.40$, ns, nor the Asian participants' index, $t(68)=-0.12$, ns was significantly different from '0'. These analyses indicate that neither group implicitly cognitively stereotyped.

6.4.3 Analysis of the Explicit Stereotype Measure

The AS-12 and WS-13 from Study Two were used to generate explicit stereotype indices. As scale reliability was greater when the target ethnic groups were collapsed over gender in Study Two, the subscales were used in this way in the present study. For the white British participants, the AS-12 had a reliability of $\alpha=.50$ for the Asian targets and $\alpha=.54$ for the white British targets. The WS-13 had a reliability of $\alpha=.55$ for the Asian targets and $\alpha=.38$ for the white British targets. For the Asian participants, the AS-12 had a reliability of $\alpha=.57$ for the Asian targets and $\alpha=.59$ for the white British targets. The WS-13 had a reliability of $\alpha=.58$ for the Asian targets and $\alpha=.41$ for the white British targets.

A 2(scale: WS-13 vs AS-12) x 2(target ethnicity: Asian children vs white British children) repeated measures ANOVA with participant ethnicity (Asian vs White) as the between-subjects factor was conducted on the explicit ratings. There were no main effects of scale, $F_{(1,150)}=2.46$, ns, or target ethnicity, $F_{(1,150)}=3.78$, ns. There were no significant interactions. In other words, participant ethnic group ratings were not significantly different, regardless of target ethnicity and scale type (Table 13).

Table 13 – Mean ratings (SD) of each Explicit Stereotype subscale for the White (N=83) and Asian (N=69) participant groups

Participant Group		Target Ethnicity	
		White British	South Asian
White British	WS-13	4.01 (.38)	4.01 (.45)
	AS-12	3.94 (.40)	3.98 (.40)
Asian	WS-13	3.98 (.41)	3.99 (.43)
	AS-12	4.10 (.32)	4.01 (.36)

6.4.4 Analysis of the IAT

It was hypothesised that response latencies would be faster when in-group names are paired with pleasant words and out-group names are paired with unpleasant words (in-group positive block) than when in-group names are paired with unpleasant words and out-group names are paired with pleasant words (in-group negative block). For example, a white British participant would respond faster to ‘happy’ when paired with ‘John’ than ‘happy’ when paired with ‘Raj’. Equally, an Asian participant would respond faster to ‘stink’ when paired with ‘John’ than ‘stink’ when paired with ‘Raj’.

Figure 6 presents the raw latencies for each of the combined categorisation tasks for each of the two ethnic groups of participants. The prediction is that the RTs would be slower when comparing the incongruent block against the congruent block. For the white British participants, the IAT effect was +132.51ms, indicating an evaluative bias in favour of white British people. The Asian group, on the other hand, had an IAT effect of +8.55ms. Paired samples t-tests of the logged latencies indicated that the two blocks were significantly different for the white British participants only, $t(82)=8.00, p<.001$. The two blocks did not significantly differ for the Asian participants, $t(68)=0.36, ns$. An independent samples t-test showed that the IAT for the white British participants was greater than the IAT for the Asian participants, $t(150)=4.67, p<.001$.

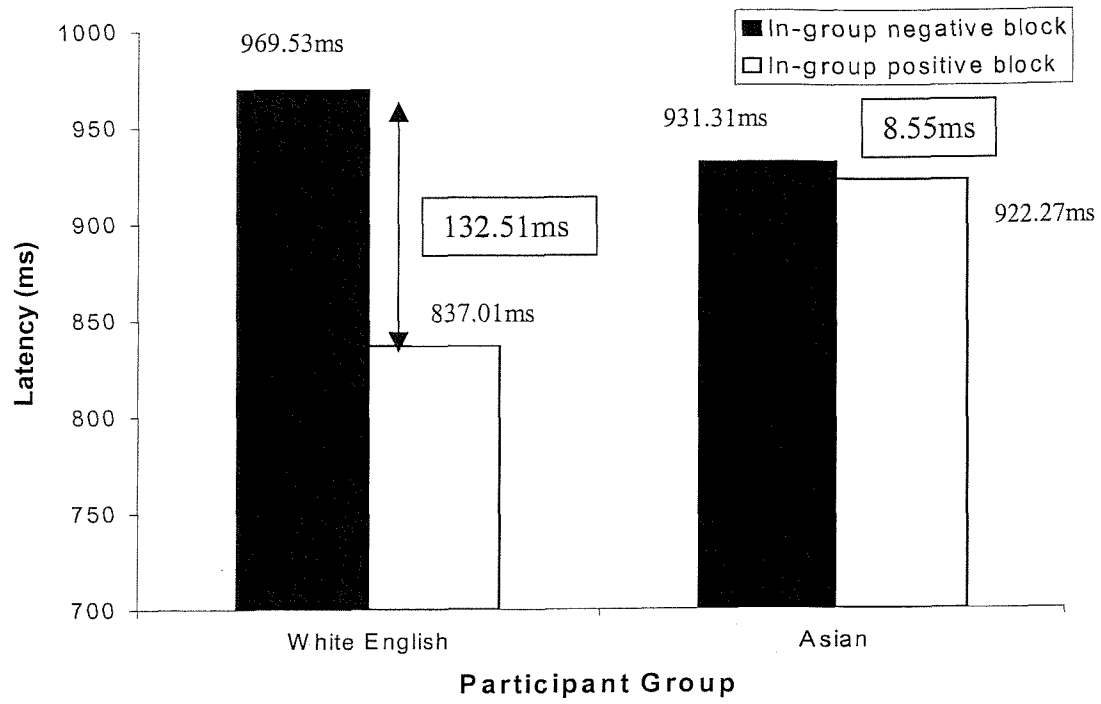


Figure 6 – IAT effects of the White (N=83) and Asian (N=69) participant groups

6.3.3.1 Counterbalancing Procedure

The IAT block orders were counterbalanced, where the incongruent blocks were presented to half the participants first and the congruent block was presented to the remaining participants first. T-test analysis showed that this procedure did not have any effect on IAT effect score for either the white British group, $t(82)=1.69$, ns, or the Asian group, $t(68)=0.98$, ns.

In addition, half the participants completed the IAT phase before the priming phase and the other half completed the IAT after the priming measure. A t-test was used to compare the logged IAT effects before and after the priming phase for each of the ethnic participant groups. This counterbalancing procedure did not have any effect on the IAT effects for either the white British group, $t(82)=1.04$, ns, or the Asian group, $t(68)=1.39$, ns.

6.4.5 Correlation Analyses

In keeping with the analyses of Study Two, implicit and explicit measures were correlated.

The explicit subscales positively correlated with each other in both participant groups (Tables 14a and 14b). There were no correlations between the explicit stereotype measure and the IAT for either participant group. For the Asian participants, the IAT and evaluative index positively correlated.

Table 14a– Correlations of the measures for white British participants (N=83)

	1	2	3	4	5	6
1. aAS-12	-					
2. wAS-12	.37**	-				
3. aWS-13	.49**	.48**	-			
4. wWS-13	.42**	.31**	.56**	-		
5. IAT	.20	.15	.11	.09	-	
6. Eval. Stereo. Index	.01	-.05	-.08	-.04	-.19	-
7. Cog. Stereo. Index	-.02	-.03	-.21	-.19	.20	.15

** p<.001

Table 14b– Correlations of the measures for Asian participants (N=69)

	1	2	3	4	5	6
1. aAS-12	-					
2. wAS-12	.61*	-				
3. aWS-13	.61*	.59*	-			
4. wWS-13	.41*	.59*	.45*	-		
5. IAT	.08	-.05	-.03	-.16	-	
6. Eval. Stereo. Index	.22	.04	.08	-.02	.24	-
7. Cog. Stereo. Index	.10	.07	.04	-.10	-.11	.11

* p<.05

NB: aAS-12=Asian target groups on the AS-12
wAS-12=white British target groups on the AS-12
aWS-13=Asian target groups on the WS-13
wWS-13=white British target groups on the WS-13

6.4.6 Summary of Results

Contrary to the findings in Study Two, neither ethnic group held explicit stereotypes. White British, but only white British participants were found to have implicit evaluative stereotypes on the IAT. The priming measure indicated that it was the valence of the word rather than the extent of its stereotypicality that was associated with the ethnic name primes. Both participant groups generally responded to White names preceding positive words faster than Asian names preceding positive words. In addition, Asians were faster at responding to Asian names preceding negative Asian words. Both Asian and white British participants generally categorised positive words faster when these were preceded by white British names than when they were preceded by Asian names. This indicates that both groups are likely to show a positive bias toward white British people. Both participant groups showed an implicit positive bias toward white British people according to the Evaluative Stereotype indices.

6.5 Discussion

The present study aimed to modify the priming paradigm to include positive and negative words so any potential valence confound was eliminated. It was found that the evaluative content of the words had a stronger association in memory to the target groups than the cognitive content of the words. This was the case for both ethnic groups. Negative words were more strongly associated with Asian names and positive words were more strongly associated with white British names. In addition, the evaluative index showed an implicit bias toward white British people. These findings supported the first hypothesis. It was also predicted that the Asian participants would be fastest at categorising positive words preceded by Asian names and negative words preceded by white British names because negative treatment of the Asian minority by White majority may create perceived out-group negativity. This did not support the first hypothesis. The results suggested that Asian participants associated positive words (stereotypical or not) more with white British names than with Asian names. Asians were also likely to link negative stereotypical words more than positive stereotypical words with Asian names. In addition, the evaluative index indicated that Asians showed a positive bias toward white British people, not Asian people. These latter findings suggest that Asian people may hold negative evaluative stereotypes of their own group, particularly of negative words that are considered typical of Asians (e.g. timid, meek).

Why is it that Asians associate their in-group with negative evaluative stereotypes? It could be argued that if minorities feel discriminated against by Whites through stereotyping (Niemann, O'Connor & McClorie, 1998), negative treatment from White university teaching staff (Ancis, Sedlacek & Mohr, 2000) and health professionals (Al et al, 2001), then they are likely to evaluate themselves negatively. This suggests that negative beliefs about Asians shared by white British people may have a self-fulfilling nature. Negative stereotypes may lead to their own fulfilment because targets of the stereotypes begin to behave in a manner that is expected of them and believe that they hold those characteristics of the stereotypes themselves (Brewer, 1995; Jussim, 1989). Ancis, Sedlacek and Mohr (2000) conducted a study about the cultural climate at university that supports this idea. The authors found that Black university students felt pressure to conform to stereotypes of their in-group, even if the stereotype was not

true for them as an individual. Minority students consequently felt uncomfortable and insignificant as individuals. Interestingly, the White students felt limited ethnic tension, reporting that the university climate respects the racial diversity brought by minority students.

There were also some interesting findings for the other measures. This time neither participant group differentiated between the four target groups on the explicit scale. The second hypothesis was therefore not supported. However, the nature of the measure is explicit. As Banaji and Greenwald (1994) state, where individuals once explicitly derogated different social groups (e.g. Blacks are bad), they no longer explicitly derogate different social groups for fear of societal disapproval. In other words, people no longer explicitly report their opinions about ethnic groups because society may label them a racist (McConahay, 1986). In short, Banaji and Greenwald acknowledge that Western society, as a whole, views ethnic stereotypes as unacceptable. However, the authors believe that individuals still hold ethnic stereotypes. People do not overtly report their ethnic stereotypes because people do not want society to disapprove of them. Therefore, people explicitly report that they do not endorse ethnic stereotypes which is in line with societal opinion, despite holding contrary private beliefs. Therefore, one would expect that target social groups would be explicitly rated similarly. Differences in Study Two's explicit findings and the present explicit findings could be attributed to the experimenter being Asian rather than white British. Adherence to egalitarian values may be made stronger in such a situation.

Yet again, the IAT found implicit evaluative stereotypes among white British participants. In other words, white British people are more likely to associate negative traits with Asians than with in-group members and positive traits with in-group members than Asians. The third hypothesis with respect to white British participants was therefore supported. Interestingly, the Asian participants did not show bias toward either target group, although a trend in favour of the in-group was evident (i.e the IAT effect was a positive score). Therefore, the third hypothesis with respect to Asian participants was not supported

An explanation for the interesting IAT findings of the Asians could be seen in terms of schema complexity of own-group and out-group members. According to Niemann, O'Connor and McClorie (1998), minority group members view themselves and out-groups both positively and negatively, resulting in egalitarian evaluations of in- and out-groups. White people, however, tend to view out-group members negatively, but are more even-handed in their evaluations of in-group members. The IAT findings support this assertion because the Asian group did not show any bias and the white British group showed an in-group bias where the out-group was negatively evaluated.

Alternatively, when combined with the priming findings, the findings can be accounted for in terms of stereotypes being culturally derived. According to the sociocultural perspective of stereotypes, the Asian participants should be aware of the ethnic stereotypes in British society because most of them were raised in Britain. Therefore, associating Whites with positive words and Asians with negative words, as both participant groups did, shows a universal awareness of positive evaluative stereotypes toward Whites and negative evaluative stereotypes toward Asians in contemporary Britain. Maybe, then, Asians recognise the existence of Asian negative evaluative stereotypes in society (as evidenced in the priming task) and these negative evaluations affect their favourability response toward their in-group (as shown in the IAT). In this sense, the priming task can be seen as a measure of general evaluative stereotypes toward certain groups and the IAT as a measure of target group favourability. That is, white British people evaluate Asians negatively and view Asians as less favourable than their in-group members. Asians evaluate Asians negatively and this affects natural in-group positivism by reporting equal favouritism with in-group and out-group members.

White British participants did not appear to explicitly stereotype the target groups. They showed more implicit positive evaluative stereotypes toward the in-group than the out-group on the IAT and the priming measure. On the other hand, Asian participants did not stereotype explicitly or implicitly on the IAT. On the priming task, they associated negative terms with the in-group and positive terms with the out-group.

6.6 Chapter Summary

White British participants stereotyped implicitly, but not explicitly. Asians did not stereotype explicitly or implicitly on the IAT. Both participant groups implicitly evaluated Asian people negatively and white British people positively on the priming task. Despite the addition of positive and negative words to the stereotype stimuli, the priming measure maintained a stronger association between the stereotypes' evaluative content and the ethnic name than the cognitive content and the ethnic name. Therefore, the priming task can be seen as a measure of implicit evaluative stereotypes. The next chapter presents a study of the association between individual differences in the in-group evaluative bias found in these studies and behaviour ratings.

CHAPTER SEVEN

Study Four

7.1 Chapter Overview

Implicit stereotypes have been a consistent finding among white British students in the present research. The final stage within the aims of this thesis was to address the impact of ethnic stereotyping on ratings of children's behaviour. White British participants completed the Explicit Stereotype measure, the IAT and two different versions of the priming task. In addition, standardised vignettes depicting either an Asian or a white British child behaving in either a positive manner or a negative manner were rated on the SNAP-IV (Swanson et al., 1992) and two stereotype subscales. Findings for the Explicit Stereotype measure and IAT replicated Study Three. That is, participants did not explicitly rate the target groups differently and they showed a positive in-group bias on the IAT. Results from the priming tasks indicated that participants associated white British people with positive words and Asians with negative words, regardless of the stereotypicality of the word. The vignette targets were not rated differently as a function of the ethnicity of the child depicted in the vignette. The most interesting finding was an association between behaviour ratings and IAT scores - the lower the white British vignettes were rated for problematic behaviours, the more positive was the evaluation of the white British targets on the IAT. This suggests that the more white British people implicitly see their in-group as positive, the more positively they rate the in-group behaviour. The implication is that rating bias is due more to under-rating white British children's problem behaviour than over-rating Asian children's problem behaviour. In sum, findings from the implicit and explicit measures were consistent with the previous studies of this thesis and perception appears to be implicitly affected by positive white British stereotypes rather than negative Asian stereotypes.

7.2 Introduction

Consistent with previous stereotype research, the present research demonstrated that Asian children are stereotyped as passive, quiet, attentive, hardworking, well behaved, polite and conforming. On the other hand, the present research demonstrated that white British children are stereotyped as disruptive, aggressive, inattentive, good at academic subjects and sports, loud, spiteful and extroverted. Generally, the stereotypes of Asians were positive, but those of white British children were more negative. However, in Study One, teachers reported that these stereotypes were endorsed by members of their profession less than the general public. In Study Two, participants (all white British) showed explicit stereotypes of each target group to be similar to those identified in Study One, i.e. the positive behaviours were rated as more typical for Asian children and the negative behaviours were rated as more typical for white British children. However, the participants also associated negative words with Asian targets and positive words with white British targets on both IAT and priming tasks. On the whole, the findings suggest that people were explicitly positive, but implicitly negative, about Asians. In Study Three, the priming task used in Study Two was modified to include positive and negative stereotypes for both target groups. Essentially, Study Three was a replication of Study Two, this time with white British participants and Asian participants. The target groups were rated similarly on the Explicit Stereotype measure by both participant groups. On the IAT, white British, but not Asian, participants were found to have implicit evaluative stereotypes favouring the in-group. For the priming task, both participant groups generally categorised positive words preceded by White names faster than positive words preceded by Asian names. In addition, Asians were particularly fast at categorising negative Asian words preceded by Asian names. The priming measure indicated that it was the evaluative content of the word rather than the extent of its stereotypicality that was associated with the ethnic name primes. In particular, positive words were implicitly associated with white British people and negative words with Asian people.

In the present thesis, it has been consistently found that negative evaluations of Asians and positive evaluations of white British people exist on an implicit level. The data also show that implicit findings differ from explicit findings. As far as the aims of

this thesis are concerned, the findings point to the possibility that negative evaluative stereotypes about Asians do still exist but that they exist implicitly, rather than explicitly. In much the same way, positive evaluative stereotypes about white British people exist implicitly. But, how do these implicit beliefs affect perception? How do these consistently identified biases affect how adults rate children's behaviour?

Devine (1989) showed that implicit stereotypes affect White people's perception of Black people's behaviour. In her experiment, participants were categorised into high and low prejudice groups using the Modern Racism Scale (McConahay, 1986). Participants were then randomly placed in one of two conditions. Each condition had a word list that was presented to the participants. In one condition, the word list consisted of mainly Black stereotype words such as poor, lazy, athletic, ghetto and rhythm (80 percent of the content, the remaining 20 percent was made up of neutral words). In the other condition, the list consisted of predominantly neutral words, such as water, number, animal, people and television (the remaining 20 percent was made up of stereotyped words). These words were subliminally presented and participants indicated which side of the screen the words appeared. Participants then read a paragraph of a man ('Donald') engaging in ambiguously hostile behaviours (e.g. 'A salesman knocked on the door and Donald refused to let him in. He also told me he was refusing to pay his rent until the landlord repaints the apartment'). The participants then completed 12 trait scales, some relating to hostility. Participants primed with predominantly Black stereotype words rated the behaviours exhibited by 'Donald' as more hostile than those primed with predominantly neutral words. This effect was equally strong for high and low prejudiced participants. That is, the subliminal activation of social stereotypes affected the evaluation of ambiguous hostile behaviours for both high and low prejudiced individuals. Devine concluded from this study that racial stereotypes are well-established in the cognitive structures of people socialised within Western society, regardless of their expressed level of prejudice. These stereotypes can be activated by appropriate environmental cues and, once activated, influence the social perceptions and judgements individuals make. Thus, it appears that priming stereotypes, even unconsciously, can affect the interpretation of subsequently encoded social information (see also Bargh & Pietromonaco, 1982; Erdley & D'Agostino, 1988).



Previous research has suggested that ratings of minority children's behaviour may be inaccurate because of stereotypes (e.g. Sonuga-Barke et al., 1993). The aim of this final study is to explore whether behaviour ratings of Asian children are associated with implicit or explicit negative stereotypes about those children, or whether behaviour ratings of white British children are associated with implicit or explicit positive stereotypes about white British children. In other words, is there a role for stereotypes in explaining the 'hidden bias' as reported by Sonuga-Barke et al. (1993)?

Sonuga-Barke et al. (1993) found that when a white British child and an Asian child exhibit the same behaviours, the Asian child is more likely to be rated as exhibiting behaviour problems than is the white British child. Initially, it was proposed that the 'hidden bias' might be related to the Shifting Standards hypothesis, as stated in Chapter One. In this theory, the authors suggest that people would find it difficult to ignore a target's ethnic origin when appraising his or her behaviours. People would expect Asian children to behave less 'hyperactively' than white British children, based on the stereotypes they possess about the target group. Thus, there is a lower minimum standard for Asian children's behaviour already set in one's mind. Therefore, if an Asian boy behaves more 'hyperactively' than is expected of him (or even as 'hyperactively' as a white British boy), he will be perceived as more hyperactive than he objectively is. On the basis of this theory, it was initially expected that ratings would be related to the cognitive rather than the evaluative contents of stereotypes.

However, the findings of this thesis indicate that ethnic stereotypes are implicitly based on the evaluative rather than the cognitive content of stereotype words. This leads one to suggest that the biased perception of displayed behaviours will, if anything, be linked to the negative evaluations of the ethnic group from which the children originate, rather than cognitively based shifts in the standards of normal and deviant behaviour. Banaji and Greenwald (1994) offer a possible mechanism by which this might occur. They acknowledge that beliefs about in- and out-groups are highly prevalent and deep-rooted in Western society. These societal beliefs dictate thoughts and behaviours not to be discriminatory between in- and out-groups, even if to achieve this, one needs to edit one's reports of his or her thoughts and behaviours. However, the 'uneditable', or implicit, reports of one's thoughts and behaviours are

dictated by Western society to include negative evaluations about out-groups and positive evaluations about in-groups. As these implicit reactions are more automatic and uncontrollable, they tend to be the driving force of one's behaviour. According to the present findings, behaviour is likely to be discriminatory in a negative way toward Asians and a positive way toward white British people. In effect, Asian children's behaviours will be perceived more negatively than similar behaviours exhibited by white British children. For example, problem behaviour symptoms exhibited by Asian children will be rated as being more severe (or more negative) than similar symptoms exhibited by white British children. Alternatively, white British children's behaviours will be perceived more positively than similar behaviour exhibited by Asian children. For example, problem behaviours exhibited by white British children will be rated as being less severe (or more positive) than similar symptoms exhibited by Asian children.

In order to investigate the relationship between stereotyping and behaviour ratings, stereotypes need to be activated. Fazio (1986) states that the presentation of an attitude-object in any form (e.g. an actual person or even the name of someone perceived to be a member of a certain group) is enough to activate any biases that an individual may endorse, implicitly or explicitly, about that object. Studies have looked at the rating bias of minority children in a number of ways. For example, Bahr et al. (1991) used an interview setting where teachers were led to believe that they were talking to qualified clinicians about the behaviours of children in their classes; Sonuga-Barke et al. (1993) used ratings by teachers of their own class children; Mann et al. (1992) have used video vignettes of ethnically diverse children behaving in similar ways; and Zucker and Prieto (1977) used written vignette accounts of minority children and White children's behaviour symptoms.

This study will employ a similar written vignette design to that used by Zucker and Prieto (1977). They presented almost 300 special needs teachers with a written account about a fictional child suspected of being mentally retarded. The fictional child was depicted as either White or Hispanic. Despite intelligence test results of the fictional children being equivocal, significantly more teachers rated the fictional Hispanic student as being in need of special education placements than the fictional White student. In sum, vignettes provide a standardised measure against which any

reported differences can be attributed to rater characteristics. In the present study, the variable features in the vignettes will be the child's ethnicity (Asian or white British) and behaviour expression (well-behaved or disruptive), resulting in four ethnicity by behaviour vignette combinations.

The hypotheses for this study are:

- 1) Vignette phase: The fictional Asian vignettes will be rated more negatively than the fictional white British vignettes because white British participants have more positive implicit evaluative stereotypes of white British people than of the Asian people;
- 2) Explicit Stereotype measure: There will be no differences in explicit rating of stereotypes on the AS-12 or WS-13 scales;
- 3) Priming task and IAT: There will be evaluative bias found by the priming measures and IAT. That is, participants will more strongly associate positive words with White names and negative words with Asian names than negative words with White names and positive words with Asian names;
- 4) Stereotyping and Behaviour ratings: Participants' behaviour ratings of white British and Asian children will be associated with explicit and/or implicit stereotype measure indices.

7.3 Method

7.3.1 Participants

Eighty-seven white British students (74 females and 13 males) from the University of Southampton participated in the study for course credit. All were British nationals raised in the UK. The mean age of the participants was 21.1 years (range from 18 to 53 years). However, 20 participants were excluded (see section 7.4.6 for full details), leaving 67 participants' data in the analysis.

7.3.2 Materials

The Explicit Stereotype measure, the priming measure (renamed the IESa in the present study) and the IAT measure previously employed in Study Three will be used in this final study denoting Phases 2, 3 and 4, respectively. The new phases in this study are Phase 1 (Vignette phase) and Phase 5 (IESb phase). Both new measures are described below.

PHASE 1 – Vignette phase. Two behaviour vignettes were designed, one depicting a well-behaved boy and one depicting a badly-behaved boy. Two versions of each vignette were created in which the boy was named either ‘John’ or ‘Imran’ (see Appendix G for the four vignettes). ‘John’ represented a white British boy and ‘Imran’ represented a South Asian boy. The vignettes were based on the SNAP-IV questionnaire (Swanson, Nolan & Pelham, 1992) and also included behaviours that were found to be stereotypical of white British (disruptive, disobedient, talkative, inattentive, overactive and unmotivated) and South Asian children (quiet, reserved, hardworking, attentive, well-behaved and obedient) from Study Two.

Participants were presented with one of the possible four vignettes and were asked to rate the vignette child on the SNAP-IV scale. The SNAP-IV scale is an 18-item scale that focuses on the severity of ADHD symptoms. Ratings are made on a 7-point scale, where ‘1’ indicates behaviour severity that is ‘far below average’ and ‘7’ indicates behaviour severity that is ‘far above average.’ This measure is typically used as a clinical measure of ADHD identification (e.g. Wigal et al., 1999). It was not used in this way in this study, but because it is based on the observation of both hyperactive/impulsive and inattentive behaviours (according to DSM-IV criteria), which are negative behaviours stereotypical of white British children, it was deemed a useful measure for the purpose of this study. A high score on this scale indicates more positive behaviours/less severe ADHD symptoms.

Appended to this 18-item scale were 12 additional items. Six were the behaviour-related stereotypes that were prevalent for Asians from Study Two’s analysis of the Explicit Stereotype measure (quiet, reserved, hardworking, attentive, well-behaved and obedient). ‘Passive’ was renamed ‘reserved’ because it was not clearly evaluated

as a positive trait in Study Three's pilot study. 'Reserved' gives the behaviour a more positive connotation in line with the other five behaviours. The other six items were prevalent stereotypes of white British children (disruptive, disobedient, talkative, inattentive, overactive and unmotivated). As the SNAP and Asian stereotype items were reversed-scored, a high score on this scale indicates more disruptive behaviours.

Participants were also asked to specify the ethnicity of the fictional child depicted in the vignette and how representative of that ethnicity the child was. The ethnicity item offered four options (white British, South Asian, Far East Asian and Afro-Caribbean). The representativeness question was rated on a 6-point scale, where '1' was 'not at all representative' and '6' was 'very representative' (see Appendix H for the full questionnaire).

PHASE 5 – IESb. This measure is a priming measure that uses exactly the same presentation settings and stimuli as the priming task of Study Three (renamed the IESa in the present study). The difference between the IESb and the IESa is that the IESb uses the ethnic words as prime stimuli and the ethnic names as target stimuli. In other words, participants will be asked to categorise the ethnic names under the 'Asian' or 'White' labels after the subliminal presentation of ethnic stereotype words (prime). This format is similar to the priming task in Study Two.

Demographic questions were the same as in Study Three.

7.3.3 Procedure

Participants were asked to complete the measures on two separate days (five days apart) to mask the aims of the experiment. On the first day, participants were randomly assigned to a vignette condition and were asked to complete the vignette phase of the experiment, the IESa and the demographic questions. On the second day, they completed the Explicit Stereotype measure, the IAT and the IESb. The order of the experimental phases was counterbalanced within each day.

An Asian female experimenter who was trained to run the study greeted the participants. Five participants were run simultaneously. As in Studies Two and

Three, the participants were briefed before they started the experiment and then before each individual phase. Again, the experiment was conducted on a computer. With the RT tasks, participants were told to respond as quickly and as accurately as possible. With questionnaires, they were told to be as honest and as open as possible.

7.4 Results⁵

7.4.1 Data Reduction

The data for the response tasks were treated as in Studies Two and Three. Where applicable, logged latency data were used in the analyses. The Explicit Stereotype measure shall be analysed first.

7.4.2 Analysis of the Explicit Stereotype measure

After splitting the explicit measure into the two subscales (AS-12 and WS-13), alpha reliabilities and means were determined (Table 15).

Table 15 – Alphas reliabilities and mean ratings (SD) of subscales over target ethnic groups (N=67)

	AS-12		WS-13	
	α	Mean	α	Mean
Asian target groups	.81	4.22 (0.56)	.57	3.98 (0.54)
White target groups	.80	4.11 (0.39)	.68	4.18 (0.66)

A 2(scale: WS-13 vs AS-12) x 2(target ethnicity: Asian vs White) within subjects ANOVA was conducted on the explicit ratings. There were no main effects of scale, $F_{(1,150)}=0.67$, ns, or target ethnicity, $F_{(1,150)}=1.04$, ns. There was a significant interaction, $F_{(1,150)}=7.98$, $p<.05$. The interaction was decomposed below.

Post-hoc t-tests for each level of the scale variable indicated that on the AS-12, white British targets were not rated significantly different to the Asian targets, $t(66)=-1.02$,

⁵ Analyses were conducted using vignette conditions as a between-subjects factor. Findings on all measures were non-significant and so data were collapsed across all vignettes, unless otherwise stated.

ns. On the WS-13, white British target groups were rated marginally higher than that Asian targets, $t(66)=-1.92$, $p=.06$. T-tests for each level of the target variable indicated that Asian targets were rated significantly higher on the AS-12 than on the WS-13, $t(66)=3.11$, $p<.01$. White British targets were not significantly rated higher on the AS-12 than on the WS-13, $t(66)=0.29$, ns. In sum, Asians were rated particularly low for exhibiting white British behaviours.

To see if these ratings were in the direction of respective target group stereotypes, one-sample t-test were conducted on each subscale for each target group. The ratings for Asians on the AS-12 was not significantly higher than the midpoint, $t(66)=0.85$, ns. The rating for Asians on the WS-13 was not significantly lower than the midpoint, $t(66)=-0.13$, ns. This suggested that Asian target groups were not rated congruently with Asian stereotypes or white British stereotypes.

The rating for white British targets on the AS-12 was not significantly lower than the midpoint, $t(66)=0.87$, ns. The rating for Whites on the WS-13 was not significantly higher than the mid-point, $t(66)=0.91$, ns. This suggested that white British target groups were not rated congruently with Asian stereotypes or white British stereotypes.

7.4.3 Analysis of the IESa

In this task, the participants categorised positive and negative words preceded by Asian and White names. The mean raw latencies are shown in Table 16.

A 2(prime name ethnicity) x 2(target word valence) x 2(target word ethnicity) within subjects ANOVA was conducted on the logged latencies. There was a main effect of prime name ethnicity indicating that when the prime was an Asian name, participants categorised target words faster than when the prime was a white British name, $F_{(1,66)}=15.68$, $p<.001$. There was a main effect of target word valence indicating that negative words were categorised faster than positive words, $F_{(1,66)}=9.68$, $p<.01$. Finally, there was a marginal main effect of target word ethnicity indicating that Asian words were categorised faster than White words, $F_{(1,66)}=3.45$, $p<.07$. There were no significant interactions.

An IESa Index was calculated by subtracting the average RT for the conditions in which positive words were preceded by white British names and negative words were preceded by Asian names from the average RT for the conditions in which negative words were preceded by white British names and positive words were preceded by Asian names. Positive values indicate the presence of evaluative bias in favour of white British people. The IESa Index latency was +17.54ms. Although descriptively indicating evaluative stereotypes, this score was not significantly different from '0', $t(66) = 1.07$, ns.

7.4.4 Analysis of the IESb

In this task, the participants categorised Asian and White names preceded by positive and negative words. The mean raw latencies are shown in Table 17.

A 2(prime word ethnicity) x 2(prime word valence) x 2(target name ethnicity) within subjects ANOVA was conducted on the logged latencies. There was no main effect for any of the individual factors, but there was an interaction of target name ethnicity by prime word valence, $F_{(1,66)} = 7.05$, $p < .01$.

Post-hoc t-tests for each level of the prime word valence variable indicated that when the prime was a positive word, participants categorised White names faster than Asian names, $t(66)=3.55$, $p < .001$. When the prime was a negative word, participants did not categorise White names faster than Asian names, $t(66)=0.74$, ns. T-tests for each level of target name ethnicity variable showed that participants did not categorise Asian names preceded by positive words significantly faster than Asian names preceded by negative words, $t(66)=-1.28$, ns. However, participants did categorise White names preceded by positive words significantly faster than White names preceded by negative words, $t(66)=-4.21$, $p < .001$. These findings are consistent with the possibility that positive attributes are more strongly associated with white British people than with Asian people.

An IESb Index was calculated in the same way as the IESa above. The IESb Index score was +24.12ms. This index score was significantly different from '0', $t(66)=2.65$, $p < .01$. This result indicated implicit positive evaluative stereotypes

toward white British people.

Table 16 – Mean raw latencies (SD) of the IESa components (N=67)

Asian name prime				White name prime			
Positive Asian Word	Negative Asian Word	Positive White Word	Negative White Word	Positive Asian Word	Negative Asian Word	Positive White Word	Negative White Word
604.48 (100.48)	573.16 (92.29)	615.87 (117.50)	605.15 (103.64)	605.78 (96.94)	591.28 (95.87)	618.04 (106.54)	608.04 (111.08)

Table 17 – Mean raw latencies (SD) of the IESb components (N=67)

Asian name target				White name target			
Positive Asian Word	Negative Asian Word	Positive White Word	Negative White Word	Positive Asian Word	Negative Asian Word	Positive White Word	Negative White Word
555.50 (80.88)	545.78 (69.64)	556.05 (82.05)	553.56 (87.96)	549.56 (82.89)	557.34 (74.55)	553.72 (81.07)	557.86 (87.59)

7.4.5 Analysis of IAT

As the participants were white British, it was hypothesised that, relative to unpleasant words, pleasant words will be more strongly associated with white British names than with Asian names. That is, white British names paired with positive words and Asian names paired with negative words (in-group positive block) will be responded to faster than white British names paired with negative words and Asian names paired with positive words (in-group negative block). A positive IAT effect indicates positive evaluative bias in favour of white British people.

Figure 7 presents the IAT effect and its composite valence components (in-group negative block and in-group positive block).

The IAT effect was +220.22ms. This latency was significantly different to '0', $t(66)=10.45$, $p<.001$, suggesting an evaluative bias in favour of white British people and against Asian people.

7.4.5.1 Counterbalancing procedure

To test if the counterbalancing procedures affected the IAT effect, t-tests were first conducted on the logged IAT effects to see if the presentation of the positive and negative blocks affected the IAT scores. The IAT latency was unaffected by the counterbalancing procedure, $t(66)=1.52$, ns.

Secondly, to see if the order of IAT and priming task affected the IAT score, a t-test was conducted on the means of the participants who performed the IAT first against those who performed it second. Again, the IAT effect was unaffected by this procedural detail, $t(66)=1.07$, ns.

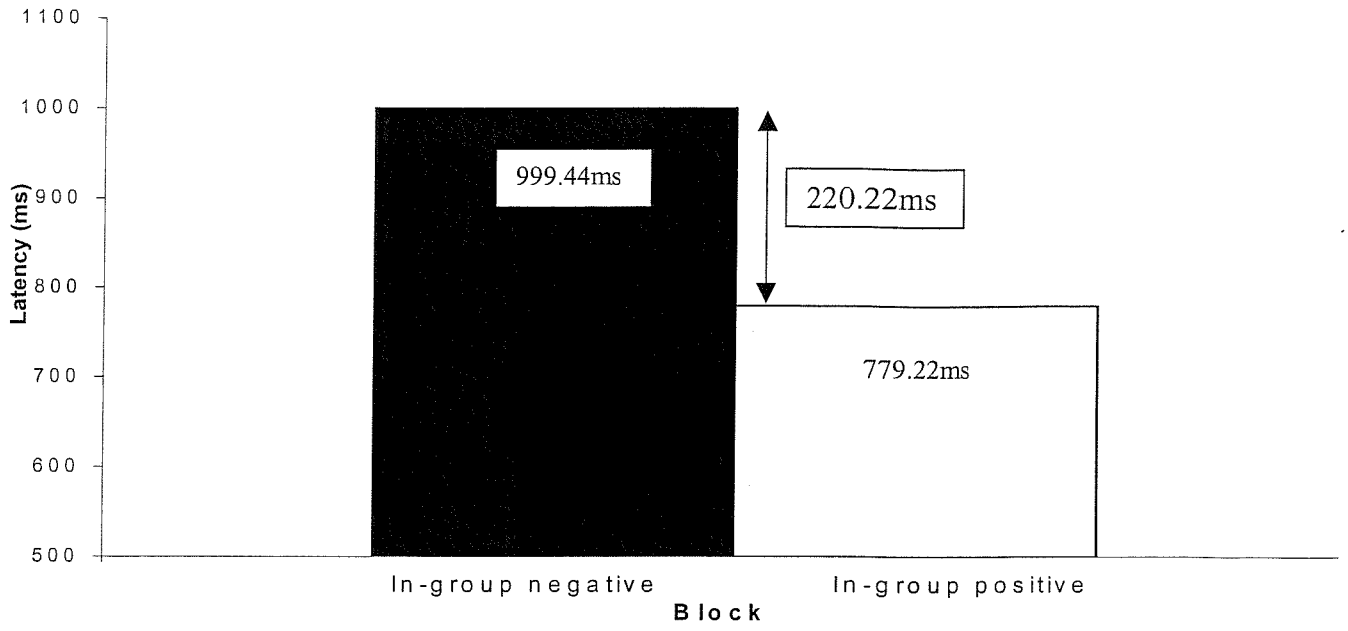


Figure 7 – IAT effect (N=67)

7.4.6 Analysis of the Vignette Phase

This phase consisted of data from the 18-item SNAP behaviour rating scale, six Asian stereotype-based items and six white British-stereotype based items. The SNAP and Asian behaviour subscales were reversed scored. Therefore, a high score on the SNAP, the Asian behaviour subscale and the White behaviour subscale indicates more problematic behaviours. In addition, two items to check the vignettes ethnicity manipulation were included.

First, a manipulation check was carried out to make sure participants perceived the vignette targets as expected. Table 18 indicates how the participants perceived the ethnicity of the vignette children.

Table 18 – Mean ratings of the vignette children’s ethnicity (N=total number of participants in the condition)

	Disruptive		Well behaved	
	Asian (N=24)	White (N=22)	Asian (N=20)	White (N=21)
White British	2	17	1	13
South Asian	20	4	17	3
Far East Asian	2	0	2	5
Afro-Caribbean	0	1	0	0
<i>% correct</i>	83.3	77.3	85.0	62.0

As the perception of the vignette child’s ethnicity is fundamental to how participants will rate the child’s behaviour, participants who incorrectly assigned the vignette child’s ethnicity were removed from the analyses. This left 20 in the Disruptive Asian (DA) group, 17 in the Disruptive White (DW) and Well-behaved Asian (WA) groups and 13 in the Well-behaved White (WW) group. Of these remaining 67 participants, analysis on how typical they thought the behaviours were for the respective ethnic groups was conducted. Figure 8 shows the mean rating of behaviour typicality for each vignette child, where the higher the rating, the more representative the child’s behaviour is of their ethnic group.

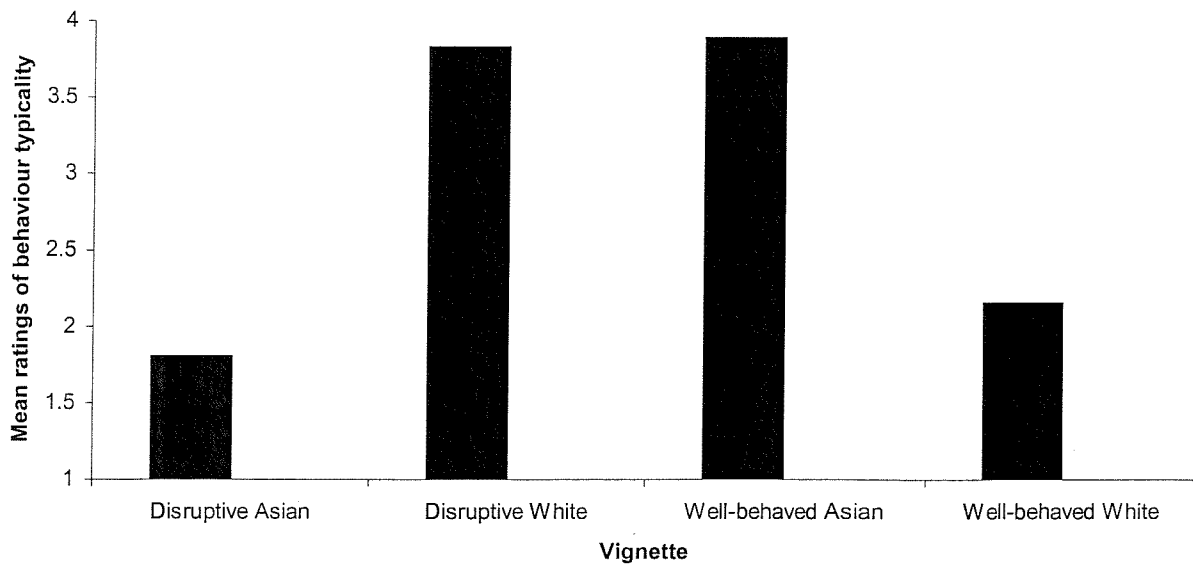


Figure 8 – Mean typicality ratings of behaviour type of the vignette children (the higher the score the more likely one feels s/he is to come across a child of that description) (N=67)

A 2(vignette ethnicity) x 2(vignette behaviour) between subject ANOVA was conducted on the typicality scores. There was not a main effect of vignette behaviour, $F_{(1,66)}=0.82$, ns, or vignette ethnicity, $F_{(1,66)}=0.60$, ns. There was a significant interaction, $F_{(1,66)}=28.62$, $p<.001$. WA ratings were higher than DA ratings, $t(66)=11.73$, $p<.001$. WD ratings were higher than WW ratings, $t(66)=10.62$, $p<.001$.

One sample t-tests (against a theoretical midpoint of 3.5) indicated that the DW child, $t(66)=4.01$, $p<.001$ and WA child, $t(66)=4.27$, $p<.001$, exhibited behaviours that were rated typical for their ethnic group. Results further showed that DA child, $t(66)=-3.74$, $p<.01$ and WW child, $t(66)=-2.91$, $p<.05$, exhibited behaviours that were rated as atypical for their ethnic groups. In other words, the disruptive behaviours were rated as typical for white British children and atypical for Asians. In addition, the well-behaved behaviours were rated as atypical for white British children and typical for Asians.

In order to test the first hypothesis, the alpha reliabilities for the SNAP, Asian and white British subscales were determined (Table 19), as were the means (Table 20).

Table 19 – Alpha reliabilities of each subscale by vignette ethnicity (N=67)

	Asian vignettes	White British vignettes
SNAP	.98	.98
Asian scale	.94	.91
White scale	.90	.90

Table 20 – Mean ratings (SD) and F values for the three subscales by vignette ethnicity (N=67)

	Asian vignettes	White British vignettes	$F_{\text{ethnicity}}$	$F_{\text{behaviour}}$
SNAP	3.98 (1.71)	4.24 (1.75)	1.10	516.79*
Asian scale	4.03 (1.77)	4.09 (1.87)	0.27	251.15*
White scale	3.48 (1.56)	3.71 (1.68)	2.54	190.07*

* $p<.001$

A 2(vignette ethnicity) x 2(vignette behaviour) between subject ANOVA was conducted on each subscale's mean score. There were only main effects of vignette behaviour on all subscales. The fictional children who were depicted as being well-behaved were rated lower on the SNAP, Asian subscale and White subscale than the

fictional children who were depicted as being disruptive (please remember the SNAP and Asian subscale were reverse scored so that a high score on the SNAP, the Asian behaviour subscale and the White behaviour subscale indicates more problematic behaviours.).

7.4.7 How do the Measures Relate to One Another?

7.4.7.1 Creating Indices for Each Measure

In order to simplify the relationships between the various dependent measures, composite scores were created by collapsing across the explicit stereotype subscales, the priming tasks and the vignette ratings, respectively.

Participants rated both Asian and White children on the AS-12 and WS-13 explicit subscales. Correlations among participants' ratings indicated that the higher participants rated Asians on the AS-12, the lower they rated Whites on the same subscale ($r=.25$, $p<.001$). Similarly, the higher the participants rated Whites on the WS-13, the lower they rated Asians on the same subscale ($r=-.29$, $p,< .001$).

Participants' ratings of Whites on the AS-12 were subtracted from their ratings of Asians on the AS-12. This composite index, labelled the AS index, indicates the extent to which participants find Asian behaviours more typical of Asians than of Whites. Next, participants' ratings of Asians on the WS-13 were subtracted from their ratings of Whites on the WS-13. This composite index, labelled the WS index, indicates the extent to which participants find White behaviours more typical of Whites than of Asians.

The IESa and IESb indices were combined to create an Implicit Evaluative Stereotype Index. The correlation between the stereotyping measures across all participants was $r=.30$, $p<.02$. This suggests that, to an extent, the two priming measures were assessing the same construct. The Implicit Evaluative Stereotype Index (IESI) was the sum of each measure's z-score.

The vignette ratings were also combined to create a composite measure. Correlational analysis showed that the subscales were strongly associated with each other (Table 21).

Table 21 – Correlations between the vignette rating scales

	1	2
1. SNAP	-	
2. Asian behaviour subscale	.94*	-
3. White behaviour subscale	-.85*	.82*

* p<.001

In addition, the SNAP, Asian behaviour subscale and White behaviour subscale were submitted to a factor analysis. Factor analysis identified a single factor accounting for 76% of total variance. Factor loadings for individual items were all at least 0.75. Because the SNAP, Asian behaviour subscale and White behaviour subscale loaded on one factor they can be combined to create a composite score. A high score indicates more problematic behaviours and a low score indicates fewer problematic behaviours. The new index was called the ‘Disruptiveness rating’.

7.4.7.2 Exploring the Relationship Between Stereotypes and Behaviour Ratings

The last hypothesis predicted that the vignettes ratings will correlate with the various measures of stereotypes to indicate a role for implicit/explicit stereotypes in rating behaviour. Tables 22a and 22b show the correlations between the measures for the white British and Asian target vignettes respectively. The indices created in the section above were used in the investigation of this hypothesis.

Table 22a - Correlations between the measures for the white British vignettes (N=67)

	1	2	3	4
1. Disruptiveness rating	-			
2. AS Index	-.14	-		
3. WS index	.51**	.42**	-	
4. IESI	.04	.20	.07	-
5. IAT	-.36*	.27	-.17	.05

Table 22b – Correlations between the measures for the Asian vignettes (N=67)

	1	2	3	4
1. Disruptiveness rating	-			
2. AS Index	-.11	-		
3. WS index	.02	.83**	-	
4. IESI	.01	-.27	.04	-
5. IAT	-.06	.34 ^a	.15	-.23

^a p<.06

*p=.05

**p<.01

The white British vignette yielded some interesting findings (Table 22a). The most interesting finding was the negative correlation between the IAT and the disruptiveness rating. This finding suggests that positive implicit beliefs toward the white British group relative to the Asian group are associated with lower ratings of behaviour disturbance of white British targets (i.e. the fictional white British child depicted in the vignettes). The disruptiveness rating and the WS index were positively correlated indicating that the more White people hold explicit stereotypes of white British people, the more likely they are to rate white British targets as showing behaviour disturbance. The two explicit indices also correlated indicating that the more Asian targets were explicitly stereotyped, the more white British targets were explicitly stereotyped. The IAT, priming and explicit indices, however, did not correlate with each other.

The Asian vignettes (Table 22b) did not indicate any relationship between the vignette ratings and the implicit or explicit indices. However, there was a strong relationship between the explicit stereotype indices, where if Asians were explicitly stereotyped, then white British people were also explicitly stereotyped. Also, there was a marginal correlation between the IAT and the AS index. This showed that the stronger the positive white British bias, the greater the explicit stereotypes of Asian targets. The IAT, priming and remaining explicit indices, however, did not correlate with each other.

In sum, the findings indicate that only the ratings of fictional white British children are influenced by implicit evaluative stereotypes. Specifically, the more implicitly positive white British people feel toward their in-group, the more likely they are to rate in-group behaviours positively. In other words, white British children's disruptive behaviours will be rated less disruptively and their well-behaved behaviours will be rated more positively.

7.4.8 Summary of Results

The participants did not rate the target groups differently on the Explicit Stereotype measure. On the other hand, the IAT and IESb identified implicit bias, where Asian children were generally associated with negative words and white British children

with positive words (the IESa indicated a trend in this direction). The behaviours exhibited by the fictional Asian and white British children were not rated differently, although disruptive behaviours were rated more typical for white British children and well-behaved behaviours were rated more typical for Asian children. There was a correlation of interest suggesting that participants who have implicit stereotypes in favour of white British behaviours are less likely to consider the behaviour of white British children to be disruptive. The implication is that implicit evaluative stereotypes appear to play a role in the rating of white British children.

7.5 Discussion

The aim of this final study was to explore if behaviour ratings of ethnically diverse children were due to the application of explicit or implicit stereotypes. A number of hypotheses were formulated to help explore this aim. The first hypothesis stated that the Asian vignettes would be rated more negatively than the white British vignettes. This prediction was not supported - the Asian vignettes were not rated significantly different to the white British vignettes. Despite a lack of target ethnicity effect on the vignette ratings, the well-behaved vignette behaviours were rated as more representative of Asian children than white British children. Equally, the disruptive vignette behaviours were rated as more typical for white British children than Asian children.

The Explicit Stereotype measure did not indicate explicit stereotypes. This is consistent with the second hypothesis, as well as Study Two's data. On the other hand, implicit evaluative stereotypes were found by the IAT and the IESb tasks. Again, negative words were associated more strongly with Asian than white British names and positive words were associated more strongly with white British than Asian names. The implicit evaluative bias indicated by these measures suggests a positive bias toward white British people and a negative bias against Asian people. This supports the third hypothesis and has been a consistent finding across the latter three studies of this thesis.

An unexpected finding was the positive correlation between the disruptiveness rating and the WS index. This indicated that the more White people hold negative explicit stereotypes of white British people, the more likely they are to rate white British targets as showing problem behaviours. This was unexpected because it is inconsistent with the Shifting Standards perspective.

The Shifting Standards perspective suggests that stereotypes create judgement standards against which individuals of the stereotyped group are evaluated, standards that shift according to the group in question. Using the example of Study One, white British children are stereotyped as disruptive (and Asians as well-behaved). One would then expect a white British child to behave more 'hyperactively', based on this stereotype about white British children, than an Asian child. Thus, with this higher minimum standard for white British children's behaviour already set in mind, if a white British child behaves hyperactively (as is expected of him or her), he or she will be perceived to be as hyperactive as he or she objectively is. On the other hand, because the minimum standard of hyperactive behaviour is lower for Asians, an Asian child behaving in a similar way to the above White child will be perceived as more hyperactive than he or she objectively is.

In other words, if the stereotype matches the behaviour exhibited, behaviour ratings are more accurate. If the stereotype differs from the exhibited behaviour, behaviour ratings are less accurate. In this final study, the correlation between the disruptiveness rating and the WS index was positive. That is, although the white British child stereotype is disruptive, the white British vignette child was still rated disruptively.

As the reported stereotypes were negative (high WS index score) one might have instead expected the vignettes to be rated as less disruptive i.e. a negative correlation (based on the idea that 'I think Whites are disruptive. When I read a story about a disruptive White child, I do not view the behaviour as being very disruptive'). The Shifting Standards perspective would only have predicted the positive correlation if the standard against which white British children were measured was positive (i.e. the implicit measure findings).

In order to investigate the final prediction, the vignette ratings were correlated with the explicit and implicit stereotype measures. Only the white British vignettes yielded a relationship between the ratings and stereotypes. Specifically, the more implicitly positive white British people felt toward their in-group, the more likely they are to rate white British behaviours positively. In other words, disruptive behaviours exhibited by white British people are likely to be rated less disruptively.

Alternatively, well-mannered behaviours exhibited by white British people are likely to be rated more positively. Thus, the implication is that implicit evaluative stereotypes play a role in improving the behaviour ratings of white British children. There was no evidence in the present study to suggest that the consistently identified negative bias against Asians negatively affects the behaviour ratings of Asian children.

It was proposed that the 'hidden bias' identified by Sonuga-Barke et al. may have been caused by a stereotype bias that leads to an over-rating of Asian children for exhibiting behaviour problems. The stereotypes of Asians were generally more well-mannered (e.g. Aronson et al., 1999; Hackett, et al., 1993; Taylor, 1986) than those of white British children. Using Biernat et al.'s Shifting Standards theory, as described in Chapter One, people would expect an Asian child to behave less 'disruptively', based on the well-documented stereotypes of Asians. Conversely, people would expect white British child to behave more 'disruptively'. Thus, with this lower minimum standard for Asian people's behaviour already set in mind, if an Asian person behaves more disruptively than is expected of him or her, he or she will be perceived as more disruptive than they objectively are. One might therefore have expected the vignettes to be rated according to their respective ethnic stereotypes. This did not occur.

According to this Shifting Standards theory, stereotyping is based on the semantic component of the behaviours, i.e. cognitive stereotypes. However, the present research has consistently found evidence of evaluative stereotypes among white British people. These stereotypes were found to be positive with respect to white British people and negative with respect to Asians. In addition, the findings from the present study are consistent with the possibility that the 'hidden bias' is associated with positive evaluative stereotypes toward white British people. Therefore, the

explorations of this latter study seem to suggest that the 'hidden bias' identified may be an under-rating of white British children's behaviour, rather than an over-rating of Asian children's behaviour.

To elaborate, the Sonuga-Barke studies assumed that white British children's behaviour was rated accurately and Asian children's behaviour was not. The inaccurate Asian ratings were therefore understood as an over-estimation of subjective ratings to be equivalent to the white British children's ratings. The present thesis proposes that, instead, Asian children's behaviour was rated more accurately and white British children's behaviour was not. This thesis has found evidence suggesting that a positive bias toward white British people affects their behaviour ratings. It could therefore be seen that the behaviour ratings of white British children in the Sonuga-Barke studies were under-estimated to be equivalent to the ratings of Asian children.

The present study has yielded two important findings. The first is that implicit evaluative stereotypes have been found yet again, where white British people are implicitly associated with positive stereotype traits and Asians are implicitly associated with negative stereotype traits. The second important finding is that white British children's behaviour ratings appear to be affected by implicit positive evaluative stereotypes. This is in line with Banaji and Greenwald's theory of implicit judgements. Banaji and Greenwald acknowledge that Western individuals are more likely to feel implicitly positive about their in-group and implicitly negative about their out-group because Western society dictates these biased beliefs. In addition, implicit stereotypes are considered the driving force of one's judgements and behaviours. Therefore, without an individual's awareness, stereotypes can affect one's perception to the point where their ratings are affected. This has been shown with respect to white British children's ratings only.

7.6 Chapter Summary

The findings from the implicit and explicit measures replicated the data of the white British participants in Study Three. That is, the participants did not rate the target groups differently on the explicit measure, but the priming and IAT measures

indicated a positive bias toward white British people. The fictional Asian and white British vignettes were not rated differently as a function of the child's ethnicity. However, ratings of the fictional white British child were associated with participants' IAT scores, suggesting that positive implicit stereotypes of white British people lead to more positive ratings of white British children's behaviour. Based on these findings, it is proposed that the 'hidden bias' identified by Sonuga-Barke et al. may reflect an under-rating of white British children's behaviour rather than an over-rating of Asian children's behaviour.

CHAPTER EIGHT

General Discussion and Conclusion

8.1 Chapter Overview

This concluding chapter restates the aims of the thesis. Using the findings from the four empirical chapters, these assess to what extent the aims were achieved. The findings from this thesis are summarised in two main points. Firstly, implicit evaluative stereotypes have been consistently found among white British university students. Secondly, the 'hidden bias' can be attributed to implicit positive evaluative stereotypes of white British people. Theoretical considerations of the findings focus on stereotype activation, prejudice, stereotype accuracy and implicit stereotypes versus explicit stereotype validity. Practical considerations of the findings focus on how stereotypes, either positive toward white British people or negative toward Asian people, can affect judgement in everyday social settings. Limitations of the studies are discussed and future work is proposed. This chapter concludes by suggesting that this thesis has contributed to knowledge by furthering the field of stereotype research.

8.2 Were the Aims of the Thesis Achieved?

In order to answer this question, the aims will be revisited and the findings summarised.

8.2.1 The Aims Revisited

The present research was inspired by a study by Sonuga-Barke, Minocha, Sandberg and Taylor (1993). In this study, teachers were asked to rate all the children in their class on the Rutter behaviour scale. The researchers then matched a white British child with a South Asian child by age, gender and the teachers Rutter scale score. Each matched white British-Asian child pair then undertook some activities in their normal classroom environment while being observed by two trained observers. It was found that the objective ratings of the Asian children's behaviours were rated significantly lower than the white British counterpart's behaviour. In other words,

teachers were over-estimating the severity of problem behaviour symptoms in Asian children. Thus, if an Asian child was subjectively rated by teachers as displaying similar behaviours to a white British child, objective criteria would find the Asian child to display significantly less problematic symptoms than the white British child. Sonuga-Barke et al. (1993) suggested that these findings indicate an over-rating bias in reports of Asian children's behaviour symptoms. In addition, they argue that this 'hidden bias' may be hidden because subjectively, an Asian child's behaviour would be seen as equivalent to a white British child.

This thesis attempted to understand how ethnic stereotypes lead to biased behaviour ratings, in general. The present research explored the relationship between stereotyping and behaviour ratings in four empirical studies. The first three studies developed stereotype measures and established the existence of explicit and implicit stereotypes. The final study investigated white British university students' behaviour ratings of fictional ethnical children. These ratings were then related to implicit and explicit stereotypes identified by the measures developed in the previous studies.

8.2.2 Summary of results

The first study of this thesis demonstrated that primary school teachers thought that others stereotyped Asian children as being quiet, passive, hardworking, well behaved, obedient and domesticated. Teachers stereotyped white British children as being disruptive, aggressive, bullies, disobedient, spiteful, extroverted, intelligent, kind, producing neat work, enjoying sports and, paradoxically, as being good and bad at some school subjects. Finally, teachers stereotyped Afro-Caribbean children as being good at dance and sports, but disruptive, aggressive, disobedient and bullies. Teachers reported that the teaching profession endorsed the stereotypes less than the general public.

The second study focused only on Asian and white British children. The behaviours that were found to be stereotypical of Asian children (i.e. positive behaviours) and the behaviours that were found to be stereotypical of white British children (i.e. negative behaviours) were used. It was found that white British university students explicitly reported differences in personal stereotypes of Asian children and white British

children. These stereotypes were similar to the public stereotypes identified by teachers in Study One. That is, the typical Asian behaviours were generally well-mannered/positive and the typical white British behaviours were generally disruptive/negative. On the IAT and priming measures, participants exhibited a stronger association between Asian names and negative words and white British names and positive words than between Asian names and positive words and white British names and negative words. This latter result suggests that white British people had more positive implicit associations with in-group members than with Asians. Overall, the findings from Study Two suggested a sharp contrast between positive explicit reports and negative implicit stereotypes of Asian people by white British students. Study Three explored this difference further by investigating the evaluative component of stereotypes. This was achieved by employing both positive and negative stereotypes for each ethnic target group in the priming task. In addition, Asian students participated in the study.

In this third study, Asian and white British targets were not rated differently on the explicit stereotype subscales. There were no between-subject effects of participant ethnicity (Asian and white British) on any of the explicit subscales. The IAT indicated a negative bias against Asian targets by the white British participant group. The Asian participants did not demonstrate any bias on this measure. The two participant groups responded similarly on the priming measure; that is, both participant groups responded faster to white British names following positive words than negative words. In addition, for Asian participants, in-group names were associated more strongly with negative words than with positive words. The findings on the implicit measures for the white British participants largely replicated Study Two's findings. The consistently identified implicit evaluative stereotypes were then applied to a specific social setting.

Only white British participants were used in the final study of this thesis. In addition to completing the stereotype measures used previously in Study Three, a behaviour account was rated for problem behaviour severity. Asian and white British target groups were not explicitly rated differently, but were implicitly rated differently on the IAT (as previously found in Studies Two and Three). Both priming tasks showed implicit evaluative stereotypes according to their indices. Also, white British names

were particularly associated with positive attributes. Again, this is consistent with Study Three's findings. A vignette measure showed that the same behaviours displayed by ethnically different children were rated similarly. However, a correlation between the IAT and vignette ratings suggested that implicit positive bias toward white British people reduces the negative perception of white British children's behaviours. Interestingly, there were no relationships between the Asian vignette ratings and stereotype measures. In addition, the behaviours in the disruptive vignette were rated as more typical of white British children and the behaviours in the well-behaved vignette as more typical of the Asian children.

In summary, the findings of this thesis indicated that white British people implicitly stereotype by word valence more than word content. Furthermore, the stereotypes about Asian people are implicitly negative. On the other hand, the stereotypes about white British people are implicitly positive. Explicitly, ethnic groups are perceived similarly (or positively as in Studies One and Two). These findings are consistently found in the latter two studies of this thesis. According to Banaji and Greenwald's (1994) discussion of modern stereotypes, in-group and out-group stereotypes are prevalent and deep-rooted in Western society. Banaji and Greenwald believe that Western society dictates explicit thoughts and behaviours to be neutral toward all ethnic groups, despite what one might actually believe. However, what one might actually believe, i.e. one's implicit thoughts, are more automatic and uncontrollable. Banaji and Greenwald propose that Western society implicitly dictates negative evaluations toward Asians and positive evaluations toward white British people. Individuals who are socialised within Western institutions toward maintaining the dominant culture status will be inescapably susceptible to thinking and behaving in the biased way described above. The present studies indicate that implicit bias toward Asians exhibits itself in the form of negative evaluative judgements and implicit bias toward white British people exhibits itself in the form of positive evaluative judgements. This is in line with Banaji and Greenwald's argument. Using the authors' theory, explicit evaluations of Asians will be edited to be neutral. But, because the maintenance of the dominant society is ingrained in individuals, Asians will be more automatically evaluated negatively and white British evaluated positively. Consequently, behaviour and perception directed toward Asian and white British people will be more negative or positive, respectively. In the present case, it

was found that positive evaluations about white British positively bias ratings of white British children's behaviour. Negative implicit evaluations about Asians do not negatively bias ratings of Asians. In other words, ethnic evaluative bias is not so much in a negative direction toward Asians, so much as in a positive direction toward white British people. Implicit stereotypes exist in a positive direction toward white British people and a negative direction toward Asians. In addition, implicit positive evaluative stereotypes only affect the behaviour judgements of white British children by lowering the reported severity of problem behaviours.

This finding raises the interesting possibility that the 'hidden bias' may not be so much an over-rating of Asian children's behaviour, as an under-rating of white British children's behaviour. To elaborate, the Sonuga-Barke paper found that white British and Asian children's behaviour was subjectively rated similarly, but objective measures rated Asian children's behaviours as significantly less problematic than white British children's behaviour. It was assumed that white British children's behaviour was rated accurately and Asian children's behaviour was not. The inaccurate Asian ratings were therefore understood as an over-estimation to be equivalent to the white British children's ratings. The present thesis proposes that, instead, Asian children's behaviour was rated more accurately and white British children's behaviour was not. As this thesis has found that a positive bias toward white British people affects their behaviour ratings, it is possible that the white British children's behaviour ratings in the Sonuga-Barke studies were under-estimated to be equivalent to the Asian children's ratings. Identified differences in behaviour expression do not necessarily have to mean that the minority child has been inaccurately judged.

The same principle of under-rating White children's behaviour can be applied to other research documenting ethnic bias in perception. For example, Zucker and Prieto (1983) found that teachers were more likely to refer a fictional Hispanic child for special needs placement than a fictional White child exhibiting the same characteristics. The authors implied that the fictional White child was accurately referred for placements and that the fictional Hispanic child was over-referred for special needs placements. Using the proposal of the present thesis, the fictional Hispanic child was accurately referred for placements and the fictional White child

was not being referred enough. Similarly, Bahr et al. (1991) conducted a study to test for ethnically biased behaviour judgements in primary school teachers. Teachers were invited to talk about children they had identified in their classes as disruptive, difficult to teach and consequently, at risk of receiving a clinical referral. Despite equivalent objective reports, teachers were more likely to rate Black children in need of clinical referral. The present thesis would propose that this finding occurred because White children are implicitly stereotyped in a positive way that results in their under-referral to clinical services. Finally, Shinn et al. (1987) found that teachers were more likely to label a Black child as suffering from learning difficulties than a White child displaying a similar academic history. Again, it could be that the number of Black children referred was accurate, but this number was seen as relatively high because the positive bias in favour of White children resulted in a lower rate of referrals. Thus, the proposal that White children are under-rated due to an implicit positive bias is especially strong because it can account for all ethnic bias, regardless of ethnic group (i.e. Black, Hispanic, South Asian etc.) or bias direction (over-rating or under-rating).

8.3 Theoretical Debates

Despite identifying an effect of stereotyping only on ratings of the vignettes depicting a white British child, it is clear from the present thesis, and the body of research with which it is consistent, that people do still hold stereotypes about ethnic groups of people and that these stereotypes remain unnoticed by their beholder. However, there are still a number of issues concerning the findings. These are outlined below.

8.3.1 Stereotype Activation

What seems apparent from the present research is that the possession of stereotypes does not necessarily activate associated category-based judgements. This is clear from the findings with the Asian vignettes, despite the identification of an implicit negative bias toward Asians. Thus, when does the possession of stereotypic knowledge automatically result in the stereotyped impression of an individual? The debate surrounding this issue may explain why stereotyping (i.e. the use of

stereotypes in perception) did not occur for the Asian vignette despite the identification of Asian stereotypes. This shall be discussed next.

This thesis adopted the notion that stereotypes are positive or negative beliefs about the traits of a group of people that are then applied to individuals of that same group. They consist of cognitive and evaluative information that can be activated independently of each other (Fiske & Taylor, 1991). Social groups have certain cognitive and/or evaluative characteristics associated with them. Once an individual is categorised under a certain group, the associated characteristics are activated, i.e. stereotyping occurs. In theory, then, the prerequisites for stereotyping are (a) the existence of stereotypes for a specific target group and (b) the conscious or unconscious categorisation of a individual as a member of that target group. Although the process of stereotyping was not addressed in the present research, a theory about how stereotypes are applied was briefly visited (p.11). Once individuals are categorised into their respective groups, Biernat et al. (1991) saw the application of stereotypes as dependent on different or shifting standards between perceived social groups. In other words, one group would have one standard applied to them and another group would have another. Consequently, the members of the groups would be independently judged on their group's standard. As a result, target behaviour perceived by an individual who holds and applies stereotypes will be judged in a biased way.

As Devine (1989) found, the possession and activation of stereotypes does not appear to be a sufficient criterion for the actual use of stereotypes in judgements of individuals. Impressions of individuals rarely equate with stereotypes of their perceived group, and conversely, impressions of individuals rarely equate with other perceived in-group members (Brewer & Miller, 1988.) Therefore, the relationship between stereotypes and stereotyping is rather complex. At least three different models of information-processing have been put forward to explain the relationship between categorisation and stereotyping.

The first model focuses on the relevance of categorisation to current processing goals. That is, categorisation may occur without the activation of associated stereotypes because the categorisation is irrelevant to the cognitive aims of the perceiver. Based

on Brewer's (1988) distinction between category-based and personalised modes of information processing in person perception, this model assumes that stereotypes will not be accessed when there is a stronger interpersonal link between the perceiver and target. Instead, relevant traits, such as kindness, power and intelligence provide the framework from which impressions will be formed (Bodenhausen & Lichtenstein, 1987). A second model suggests that stereotypes may be activated and used in the initial stages of judgement formation, but gradually modifies as individuating information about the target becomes available and attended to (Brewer, 1988). The final model proposes that stereotypes may be activated but not used as the basis of impression formation by, for example, consciously suppressing the stereotyping process (Bodenhausen & Macrae, 1995; Devine, 1989). An alternative, more unconscious route, of stereotype non-use involves various aspects of the perceiver's information-processing context which compete with specific category knowledge as a basis of judging the target person. These aspects include salient target-specific information, contextual cues and alternative processing goals that make competing category stereotypes relevant and available. For example, a given target is known to be a man and a doctor, but the stereotypes associated with gender may be more relevant and salient to one's judgement than the stereotypes associated with his occupation. Overall, these models focus on the information-processing sequences that achieve a fit between individuating information and the expectancies based on the available category stereotypes (Leyens, Yzerbyt, & Schadron, 1992). The process begins with category-based judgements that are strengthened or modified as a function of the perceived fit between target information and expectancies.

The degree of modification achieved in the final impression depends on the perceiver's motivational and available cognitive resources (Pendry & Macrae, 1994). Depending on the level of information processing, motivation and cognitive capacity, the final impression may deviate substantially from the original stereotype. Such individuated impressions are still the result of stereotyping because they (a) provide a basis for limited information processing (Pendry & Macrae, 1994), and (b) provide a framework for selecting, interpreting and organising individuating information (Macrae, Milne, & Bodenhausen, 1994). In effect, the category-based model of impression formation starts with category stereotypes and finishes with the perceiver incorporating individuating information about the target to the extent that the

perceiver is able and motivated to differentiate the target from its category, as a whole.

Brewer (1995) believes that stereotyping is most likely when task demands are high, information is complex and sub-categorisation of targets (based on meaningful distinctions) is available. The conditions identified by Brewer are often present in social environments. In such circumstances, the processing of stereotypic information is facilitated at the expense of stereotype-inconsistent or irrelevant information. In other words, such stereotyping is more likely to be the rule rather than the exception in a real world social setting.

On the basis of the present research, speculation about which stereotype-activation model best accounts for why stereotyping did not occur on the Asian vignettes cannot be made. Yet, given the assertion that motivation and available cognitive resources may play a role on the stereotype application process, one might assume that the motivation needed to distinguish individual targets was high and that the cognitive resources available were also high. Gilbert and Hixon (1991) found that cognitive busyness (i.e. performing tasks to be 'mentally occupied') affects the ability to stereotype. The authors assigned participants to one of the following conditions: control, early cognitively busy, late cognitively busy and always cognitively busy. Each condition was conducted with either an Asian female assistant or a White assistant. First, participants were asked to watch a video of the female assistant holding up cards of incomplete words. While watching the video, participants had to complete the words shown on the video. Half the participants were told to rehearse an eight-digit number, the other half were told not to. Words could spell stereotypes of Asian people or neutral words. Second, participants were told to listen to a taped account of their assistant. During this phase, half the participants were told to simply listen to the tape recording and the other half were told to complete a distractor priming task. The race and behaviour ratings of the assistant were then obtained and a recall test of statements made by the assistant during her account and the ink colour of the word-fragment phases was also made.

The participants who had the Asian assistant and did not rehearse the numbers generated more Asian stereotypes in the word task. Therefore, in order to activate

stereotypes, participants need a target and a certain level of cognitive capacity. 'Late cognitively busy' participants (those who only performed the priming task) rated the Asian assistant more stereotypically on the trait dimensions than those who did not have to perform the priming task. In other words, cognitive busyness may decrease the likelihood that specific stereotypes will be activated, but may increase the likelihood of stereotyping (i.e. the application of stereotypes). However, once stereotypes are activated, cognitive busyness will increase the likelihood of stereotyping. Gilbert and Hixon concluded that merely being exposed to a person does not automatically activate a stereotype because the cognitive resources for doing so must be available. Nonetheless, once stereotypes have been activated, being mentally occupied makes it easier to use the stereotypes when forming social judgements. The measures of the present research were not completed in a social setting where cognitive demands were high and available information was complex. Future research could therefore try to investigate stereotyping in a more realistic experimental manner to account for these factors and to understand the conditions under which the application of stereotypes occurs.

8.3.2 A Possible Role for Prejudice?

What is also not clear thus far is whether stereotyping is, in fact, the underlying mechanism through which the 'hidden bias' functions. That is, can the 'hidden bias' be attributed to evaluative stereotypes, or is it a result of different social cognitive biases, such as prejudice, that are employed when asked to account for ethnically different children's behaviour?

The present thesis demonstrated an evaluative stereotype trend, where the stereotype words were associated by their evaluative content and not their stereotypicality. This was consistently found by the priming and IAT tasks. Both measures found that reaction times were facilitated when the out-group name stimuli were combined with negative words and in-group name stimuli were combined with positive words, regardless of the ethnic congruency of the word (see data from Studies Two, Three and Four). For example, 'Imran' (an Asian name) was responded to faster after 'stupid' (a negative word identified as a white British stereotype) than 'obedient' (a positive word identified as an Asian stereotype). Although this research supports the

notion that stereotypes have an evaluative component, what it does not address is the close relationship evaluative stereotypes have with prejudice. Dovidio and Gaertner (1993) already stated that the additional valence component of stereotypes clouds the previously clear distinction between stereotypes and prejudice. Given the highly debated tripartite relation between stereotypes, prejudice and behaviour (Dovidio et al., 1995; Eberhardt & Fiske, 1995), one might thus argue that prejudice was found, not evaluative stereotypes and that prejudice plays an equally relevant role in discriminatory behaviour.

Prejudice has been defined by Eagly and Chaiken (1993, p.1) as ‘a psychological tendency that is expressed by evaluating a particular [minority social group] with some degree of favor or disfavor.’ Dovidio et al (1995) have since argued for prejudice to include a cognitive (i.e. incorrectly based on a stereotype about a social group) and affective (e.g. hate) distinction. In other words, prejudice biases individuals by predisposing them to positive or negative evaluative responses that may be irrationally based on a belief about a target group. Such biases can be manifested behaviourally in voice tone (Weitz, 1972), facial expression (Butler & Geis, 1990), non-verbal cues (Word, Zanna, & Cooper, 1974), decisions in helping Black people (Crosby et al., 1980) and support for government policy (McConahay, 1986).

There are a number of contemporary theories that account for the application of prejudice. A theory of attitude-ambivalence by Hass and Katz (1988) stated that people have both favourable and unfavourable evaluations toward racial groups based on stereotypes and that unfavourable reactions will only be displayed if the response can be rationalised not on the grounds of racial bias. For example, according to this theory, a White bank manager would not show that he or she dislikes Black people until a Black unemployed graduate applies for a loan and is rejected. If a similar White graduate applied for a loan, the White bank manager would be more likely to give him or her the loan. It may be White individuals harbour deep-rooted aversive feelings toward Asian people and that the racism they feel is simply expressed in the form of exaggerated behaviour judgements – where their negative feelings can be justified by an Asian child’s apparent disruptive behaviours.

Modern Racism (McConahay, Hardee and Batts, 1981) is another theory. Modern racism consists of four elements. They are (a) discrimination is a behaviour of the past, (b) Afro-Caribbean people are too pushy, (c) this behaviour gives Afro-Caribbean people an unfair advantage and (d) they are undeserving of their gains. Individuals who hold these ideas do not believe themselves to be racist because they accept that racism is negative and believe that negative evaluation of Afro-Caribbean people derives from what they believe is an unfair advantage enjoyed by Afro-Caribbean people in modern society rather than from racist beliefs. Additionally, they believe that racism only exists in a traditional, negative, overt form, where views are based on Afro-Caribbean stereotypes of laziness, ignorance and dishonesty. In other words, modern racists, embrace attitudes that reflect the above, while simultaneously rejecting 'old-fashioned' racism. McConahay, however, proposes that negative racial affect continues and influences how relevant information is evaluated.

Another theory regarding prejudice is that of aversive racism. Aversive racism has been defined as a conflict between feelings and beliefs regarding sincere egalitarian values and unacknowledged negative feelings and beliefs about Afro-Caribbean people (Dovidio & Gaertner, 1986). These attitudes are based on the cultural context of racial attitudes, values and beliefs. The stereotypes, prejudices and negative feelings resulting from such cultural contexts are then attached to members of the racial groups judged by the society. The negative affect is not hate, so much as discomfort, disgust and sometimes fear, in the presence of Afro-Caribbeans or race issues. Such feelings promote avoidance rather than hostile behaviours toward Afro-Caribbeans.

Finally, Sears (1988) argues that traditional forms of racial bias exist as hostility and derogation toward Afro-Caribbean people and their culture and Sears and Kinder (1970) suggest that this is further endorsed by formal inequalities. Symbolic Racism (Kinder & Sears, 1981) sees prejudiced attitudes as a result of childhood socialisation of normative beliefs and values. In essence, these values are accepted, the racial group is disliked and the dislike being rationalised as a failure of the group members to support core values. Then, as an adult, without declaring oneself to be racially motivated, one opposes matters that are favourable to the racial group.

Theoretically, the distinction between stereotypes and prejudice is less clear because both have evaluative and cognitive components. The implicit findings of Studies Two, Three and Four can therefore be described as prejudice given the consistent emergence of valence effects. Thus, the Sonuga-Barke paper found a rating bias of Asian children that can also be explained by the existence of prejudice. However, this thesis aimed to explore the potential role of stereotypes in the ‘hidden bias’ phenomenon. The issue remains whether one does not, at some level, believe that Asians are ‘bad’ and Whites are ‘good’ if one associates Asians with negative traits and Whites with positive traits. It is clear to see from the findings that beliefs about Asians and Whites are differentially negative and positive. As the IAT only shows evidence for evaluation, which is a component of both stereotypes and prejudice, one cannot use the IAT to differentiate between stereotypes and prejudice. Despite the lack of conceptual clarity, there are still a number of findings from this thesis that can support the idea that stereotypes are indeed playing a role in behaviour rating. This is particularly evidenced in Study Two when participants explicitly rated Asian and white British children differently (and consistently with the stereotypes found in Study One). In addition, the final study found that participants reported well-mannered behaviours as being more typical of Asian children and disruptive behaviours as more typical for white British children. These findings were also consistent with previous stereotype research. Whether stereotypes or prejudice play a role in the ‘hidden bias’ is a difficult question to ask based on the present thesis – it is certainly something that can be considered in future research.

8.4 Methodological Debates

8.4.1 Implicit versus Explicit Measures

The validity of the implicit versus explicit measures (how can one rate the efficiency of one type of measure over the other) represents another important area of debate. So far, much of this thesis presupposes that implicit measures are more accurate than explicit measures. A distinct difference in stereotype conceptualisation and measurement was noted in the 1970’s (when race relationships were markedly improving) as racist behaviour do not correspond self-reported racial beliefs. In other

words, people explicitly viewed minority groups in a positive light, but their behaviour indicated the opposite. Self-presentational forces play a motivational role in rating behaviours. Participants edit their responses to fit in with the ideas of other people, or because they assume their own ideas match those of the wider public. To counteract these forces, in the present thesis, responses remained anonymous and confidential and participants were asked to respond openly and honestly while in individual cubicles. One presentational force such experimental procedures cannot eliminate are forces that exist in terms of the image one wishes to portray to oneself to maintain the impression that one is not a racist.

Stereotype conceptualisation therefore moved from a shift from a focus on explicit beliefs to a focus on implicit, more automatic beliefs. In line with this re-conceptualisation came the development of implicit stereotype measures. The rationale for implicit tools resides in the argument that they measure the strength of association between two sets of stimuli (Fazio, 1986) that cannot be edited for social desirability reasons, unlike explicit reports. Thus, the implication from this body of research is that people will edit their responses on self-reports in keeping with societal expectations, whether they believe the societal viewpoint or not. As they cannot edit on implicit measures, more automatic or 'true' representations of a target are determined.

With respect to the present research, this is an interesting implication because it would predict that if people are found to hold implicit stereotypes, their behaviours would correspond accordingly. However, as we have seen, people were explicitly neutral in their judgements, implicitly biased, but particularly positive toward white British people. There is evidence to suggest that implicit stereotypes are associated with exhibited behaviour more than explicit measures. The presence of response editing has consequences for the data reported, which implicit measures have attempted to overcome. There is still debate as to the reliability of implicit measures, although Kawakami and Dovidio (2001) have recently come some way to establish the reliability of such measures. The present studies were not conducted to establish the accuracy of implicit tools relative to explicit tools and the methodology adopted here is not appropriate to address this issue. Future research could examine this issue and include other methods to determine the more accurate measure of personal

stereotypes. Response editing is something that people residing in a social world cannot escape and something that future work needs to strongly address, perhaps in keeping with models of stereotype activation where cognitive and motivational factors are important.

8.4.2 The Appropriateness of Stimuli

In Study Four, it was proposed that the white British vignettes were rated less disruptive because the participants held implicit positive stereotypes about white British people. The Asian vignette ratings, on the other hand, were not associated with the stereotype measures. Stereotyping effects appear to be related to the type of stimuli utilised to examine stereotypes. For example, a number of studies conducted have employed the use of audiovisual stimuli from which their participants made their judgements (e.g. Arcuri, 1982; Brewer, Weber, & Carini, 1995; Macrae et al., 1994; Taylor, & Falcone, 1982; Stangor et al., 1992). Physical features provide a basis on which to base category information processing because they provide information about social categories that are meaningful to the perceiver. Physical features such as clothing or hairstyle do not affect categorisation process, but more salient features such as race and sex do (Stangor et al., 1992). However, a limitation of visual stimuli is that people can more easily exhibit multiple category membership conflict, where targets are seen to belong to, for example, a male group and an Asian group. Macrae et al. (1994) found that race-based categorisations result in the suppression of gender-based categorisations. In Study Four, visual stimuli may therefore have been a better form of presentation to obtain race-based categorisation, as opposed to written stimuli because the target vignettes were both males and may have consequently reduced the number of participants perceiving the well-behaved 'John' as a Far-East Asian male. Although there are concerns with using more meaningful, visual stimuli to the perceiver, suppression of other categories in the stereotyping process must be investigated further.

8.4.3 Replicating the Sonuga-Barke et al. Study

Stereotyping may have been found more strongly if the rating bias was identified again prior to conducting Study One because race-based findings are quite changeable

because society is dynamic and so stereotyping may not have manifested itself in the same way as in 1993 when the most recent British rating bias research was conducted by Sonuga-Barke et al. A possible reason for the absence of pronounced stereotypes relates to the fact that stereotypes are malleable and change over time. Hence, stereotypes may not have manifested themselves in the same way as in 1993 when Sonuga-Barke et al. identified the 'hidden bias' phenomenon. From this perspective, it would be useful to replicate the Sonuga-Barke study. By doing this, this could (a) indicate whether the 'hidden bias' is a persistent phenomenon and (b) provide a stronger practical justification for further research on the role of ethnic stereotypes in ratings of ethnically diverse children's behaviour.

8.4.4 Students as Participants

The use of university students to test this idea of biased reports of behaviour may have also contributed to the lack of stereotyping effects due to the motivational factors proposed in this process (Brewer, 1988). Response editing may have been especially high because the idea of stereotyping children is even less socially acceptable than stereotyping adults. Maybe teachers would have been a better choice of participant because they are (a) used to questionnaires (b) used to children's behaviours (c) judging children is more normal and so would be less susceptible to response editing and (d) the 'hidden' bias issue was particularly found in teachers ratings of children's behaviour and so this population may be especially stereotyping.

8.5 Practical Implications

Although there was no stereotyping associated with Asian in Study Four, that Asians were associated with negatively words on an implicit level by white British people has implications in the social world in which we reside. The identification of implicit stereotypes, at worst, means that people are unaware that they hold stereotypes that can automatically affect their behaviour toward ethnic minority groups. In other words, they are unlikely to see that their behaviour is based on ethnic generalisations that may be inaccurate, rather than the actual qualities of the person concerned. This

latent link between biased cognition and behaviour can lead to a myriad of issues for ethnic minority groups in the UK.

There are a number of papers that have demonstrated how the possession of stereotypes can often result in clinical misunderstandings and expectations. Rosenthal and Berven (1999) found that public stereotypes coloured the way in which perceivers judged only African-American clients in a rehabilitation counselling unit. The control White clients were not perceived in the same way as the Afro-American clients. The stereotypes made the White graduate students perceive the African American clients to have less potential for education and employment upon initial client information. This perception persisted even after subsequent information was reviewed. Thus, in some cases, public stereotypes can be so ingrained in one's memory that new information is ignored, sometimes to the detriment of an individual. An article in *Community Care* (2001), a practice-based journal, criticised care professionals for providing a supposed culturally-appropriate service that was built upon inaccurate cultural stereotypes. Consequently, minority service users have been disadvantaged because the services provided for them have been based on inaccurate stereotypes of the minority groups.

Stereotypes can also disadvantage minorities in occupational settings. Collier and Schaffer (1999) found that stereotypes were particularly activated, and subsequent decisions more strongly made, when the perceiver was mentally constrained in some way (in the case of their study, the constraint was induced with a time limit). They found that sports judges were more likely to allocate Blacks to positions requiring aggressiveness (linebacker coaches) than cognitive prowess (general managers) and vice versa for Whites. Not only were the allocations made based on general stereotypes about Blacks and Whites, the perceivers also favoured the Whites for general manager positions and over-ranking Blacks as linebacker coach positions. Johnson (2000) found that 80 percent of Black respondents in the study felt that they had been impacted negatively by racism at some point during their corporate career.

Academic decisions have also been subjected to biased judgements. Miesels and Liaw (1993) reported that ethnic minority groups are some of the social groups that are likely to be retained at school. Yet, after reviewing 40 papers, Jackson (1975)

found no evidence to suggest that students with serious academic and adjustment issues benefit from grade retention. Zucker and Prieto (1977) manipulated the physical characteristics of sex and race to determine their effect on educational decisions regarding special class placement. Special education teachers in four groups were given case studies containing identical information except for sex and race of the child depicted. They were asked to indicate whether special class placement would be appropriate. Teachers indicated that special class placement and class retention was more appropriate for Mexican-American than for White children, indicating that minority race perception biases judgements about children at school.

Orzoff (2000) further found that female and Black teachers were seen as less knowledgeable and less powerful than their male and White counterparts. In addition, Orzoff found that any success exhibited by female or Black instructors was attributed to luck instead of ability. Such biasing may explain why females and Blacks do not proportionally hold high career positions.

In summary, stereotypes are present in every social setting and the implications of stereotypes being present and activated in every practical setting suggest that minority groups are always at risk of being judged in a biased way. In the case of the present research, the stereotypes about Asians suggest that there will be a negative evaluative bias against Asians. An additional danger, of course, is the idea of the self-fulfilling prophesy. Here, erroneous social beliefs lead to their own fulfilment because people tend to interpret, remember or explain others' behaviour as supporting their own preconceptions, in the absence of evidencing behaviour (Brewer, 1995; Jussim, 1989). Study Three's discussion about Asian participants associating negative words with in-group names certainly goes some way to support this theory. Self-fulfilling prophesies are also dangerous because inaccurate stereotypes or over-generalisations can end as accurate stereotypes because targets actually conform to the original erroneous belief (Jussim & Fleming, 1995). The maintenance of inaccurate stereotypes is therefore quite clear from this process. However, full discussion into the effects of self-fulfilling prophesies extends beyond the scope of this thesis.

8.6 Future Work

It has been established that stereotypes of Asian and white British children differ in their evaluative content. Whether this evaluative difference is caused by stereotyping or prejudice is certainly an issue future work should focus on. According to this thesis, the association of negative stereotypes with Asians consistently exists on an implicit level. Does this principle extend beyond this target group to other minority groups in UK? An obvious exploration would be into the stereotypes of Afro-Caribbean target groups. Study One has already found that the public stereotypes about Afro-Caribbean children are negative (unless related to entertainment, at which point they become positive). Future research could examine whether these stereotypes are explicitly and/or implicitly endorsed. In addition, Macrae et al. (1994) found that ethnic perception had a greater influence on judgement than gender perception, i.e. the activation of gender stereotypes was inhibited. Therefore, how does being female or male impact the assignment of stereotypes within each ethnic group? How can this extend into other categories of judgement (e.g. age, occupation, etc.)? This present research did not extensively look into the race/gender issue beyond interaction effects as it was decided that the stronger perceived ethnic identity of the targets (according to Macrae et al.) was more relevant to the aim of the thesis.

These are questions that are amenable to empirical scrutiny and well-developed experimental designs that could identify the stereotypes of a range of minority groups and when these stereotypes are applied. In addition, an area that was briefly touched upon was the application of stereotypes. There are theories that describe how stereotypes are applied to social groups. The assessment of the most applicable mechanism to the 'hidden bias' phenomenon in behaviour judgements could be investigated. Finally, the validity of stereotypes resulting in the 'hidden bias' issue relative to prejudice should also be explored.

These and other suggestions for future research have been proposed and they would expand and build upon the present findings, which are limited in their ability to answer all of the questions raised by them. The exploration of public ethnic stereotypes has already been raised and future research with perceivers of different age groups and targets of different age groups could investigate at what age

stereotypes are formed, applied and how stable they are across age groups.

Differences in in-group and out-group stereotypes may also occur, based on Linville and Jones (1981) complexity-extremity theory of stereotypes, which would also be interesting in light of Study Three's data from White and Asian participants. The present work does not extensively examine this issue.

8.7 Conclusion

The identification of stereotypes, how they are represented in memory and utilised, is one of the most widely explored topics in social psychology. The applicability of this area in every day life is vast and can exist to the detriment of large, innocent groups of people. This thesis has drawn on the studies from the social cognitive field to demonstrate that stereotypes about Asian children exist even in this day and age. Importantly, it demonstrates that these stereotypes are evaluative and exist on a level that is uncontrollable and therefore automatic to people. The thesis also demonstrates that ethnic bias is not so much implicitly negative against Asian people, so much as implicitly positive toward white British people. The research also supports the view that behaviour ratings are subject to distortion by the implicit endorsement of stereotypes. Particularly, the thesis proposes that this distortion is more an under-rating of white British children than an over-rating of Asian children (as assumed by Sonuga-Barke et al.). The findings contribute to the relatively new area in social psychology that supports the exploration of implicit stereotypes. The research also lends an experimentally tested and plausible answer to the body of research concerning bias in minority judgements, particularly in clinical psychology. It can also be seen to contribute to person perception research in terms of judgements, in general (e.g. personnel decisions, or academic judgements). Further research must now be conducted to more strongly establish the use of all types of stereotypes in the rating bias, as well as establish the applicability of stereotypes relative to prejudice in the biased judgement issue.

APPENDIX A
STUDY ONE'S QUESTIONNAIRE

Could you please provide us with this basic demographic information which will also be ANONYMOUS and CONFIDENTIAL:

Sex:

Age:

Ethnic origin:

White-British

Pakistani

Indian

Bengali

Afro-Caribbean

Chinese

Other:

Which school do you teach at?

Which class do you teach?

How many years have you been teaching in total?

Number of years teaching at this school:

Years of teaching minority children:

Years of teaching children with disruptive behaviours:

An Investigation into Societal Stereotypes

INSTRUCTIONS

- In this first task, we would like you to identify cultural stereotypes that you believe are widely held by the general public.
- Specifically, we are interested in stereotypes about children from different ethnic backgrounds that may be relevant to classroom performance and behaviour.
- Stereotypes are defined as "*widely shared beliefs about the personal attributes of a group.*"
- We are NOT interested in whether you personally endorse these stereotypes. Instead, we would like you to help us identify the types of cultural stereotypes that are prevalent in the broader society.
- A target group will be indicated at the top of each page. Please write as many short statements as you can (just 1-5 words) that reflect stereotypes about each group.
- Please try to be as open and as honest as possible

IT IS NOT IMPORTANT HOW MUCH EXPERIENCE YOU HAVE HAD AS A TEACHER BECAUSE WE ARE INTERESTED IN THE STEREOTYPES THAT EXIST IN THE GENERAL PUBLIC

White-British girls

Positive Stereotypes	Negative Stereotypes	Neutral Stereotypes

White-British boys

Positive Stereotypes	Negative Stereotypes	Neutral Stereotypes

South Asian (Indian or Pakistani) boys

Positive Stereotypes	Negative Stereotypes	Neutral Stereotypes

South Asian (Indian or Pakistani) girls

Positive Stereotypes	Negative Stereotypes	Neutral Stereotypes

Afro-Caribbean girls

Positive Stereotypes	Negative Stereotypes	Neutral Stereotypes

Afro-Caribbean boys

Positive Stereotypes	Negative Stereotypes	Neutral Stereotypes

Thank you for completing the first part of this questionnaire - the stereotypes you identified will prove to be very useful!

PART II

Finally, we are interested in your opinion of the prevalence of stereotyping within the teaching profession. On average, do you think that primary school teachers endorse the stereotypes you listed more or less than the general public?

For each group, please circle your response.

Compared to the general public, teachers endorse stereotypes about:

White-British girls -- more/less/about the same

White-British boys -- more/less/about the same

South-Asian boys -- more/less/about the same

South-Asian girls -- more/less/about the same

Afro-Caribbean girls -- more/less/about the same

Afro-Caribbean boys -- more/less/about the same

APPENDIX B
DEMOGRAPHIC QUESTIONS
ANSWER SHEET USED IN STUDY
ONE

DEMOGRAPHIC QUESTIONS ANSWER SHEET

I would be grateful if you could provide me with this additional information to supplement the PhD study I am conducting with the teachers at your school. This information will remain CONFIDENTIAL and ANONYMOUS.

Thank you for your help.

SCHOOL NAME AND POSTCODE.....

Average socio-economic status of the children's families

TOTAL NUMBER OF:	Boys	Girls
White children at the school		
South Asian children at the school		
Afro-Caribbean children at the school		
Children from other ethnic minority groups		
Children		

TOTAL NUMBER OF:	Female	Male
Asian teachers		
White-British teachers		
Afro-Caribbean teachers		
Teachers from other ethnic minority groups		
Teachers at the school		

APPENDIX C
**THE CATEGORIES USED TO
CLASSIFY STUDY ONE'S RESPONSES**

POSITIVE	NEGATIVE																					
<p>Dimensions:</p> <ol style="list-style-type: none"> 1. Quiet 3. Extroverted 5. Confident 7. Modest 9. Happy/positive attitude 11. Hard-working/motivated/interested/conscientious /academic 13. Value education/enjoy school 15. Intelligent/more able 17. Imaginative/creative 19. Well-behaved/settle down/mature 21. Laid back/calm 23. Kind/caring 25. Sociable/make friends easily/like working and playing in groups 27. Form lasting friendships 29. Good with feelings/sensitive/empathic 31. Polite/well mannered/considerate/amiable/helpful 33. Conforms to authority/listens to teachers 35. Honest/trustworthy/reliable/responsible 37. Attentive/listen well 39. Produces neat work/organised 41. Co-operative/works well with others 43. Mathematical/scientific/technical/likeIT 45. Good at languages/English/reading/speaking (articulate and expressive) 47. Enjoy art/dance/music/drama 49. Good at art/dance/drama/have rhythm 51. Athletic/sporty 53. Enjoy sports/PE 55. Clean/neat appearance 57. Physically attractive 59. Mix with other gender 61. Mix with other ethnic groups 63. Not overly concerned with appearance 65. Leadership skills 67. Achievement-oriented (career, ambition) 69. Positive family involvement (encouragement) 71. Dominant 73. Culturally tolerant 	<ol style="list-style-type: none"> 2. Loud/chatty/noisy 4. Quiet/shy/inhibited/passive 6. Low self-esteem/self-worth/easily led 8. Arrogant 10. Sulky/moody/negative attitude 12. Unmotivated/underachieve/uninterested/lazy 14. Devalue school/dislike school 16. Unintelligent/less able 18. Unimaginative/uncreative 20. Disruptive/hyperactive/boisterous/naughty 22. Aggressive/violent 24. Bully/mean to others 26. Unsociable/do not make friends easily/do not like groups 28. Form short-lived, changing friendships 30. Bad with feelings/insensitive/over-sensitive 32. Impolite/rude/cheeky 34. Disrespect authority/teachers 36. Dishonest/untrustworthy/sneaky/sly/irresponsible 38. Inattentive/easily distracted/fidgety 40. Produce messy/untidy work 42. Competitive/do not work well with others 44. Poor at maths/science/untechnical/IT 46. Poor at languages/English/reading/speaking 48. Do not enjoy art/dance/music/drama 50. Poor at art/dance/music/drama/no rhythm 52. Unathletic 54. Uninterested in sports/PE 56. Dirty/smelly/unhygienic/messy appearance 58. Unattractive 60. Segregate by gender 62. Segregate by ethnicity 64. Over-concerned with appearance 66. Poor leadership skills 68. No ambition/no career goals 70. Negative family involvement (spoil children) 72. Submissive to males 74. Culturally intolerant/racist 																					
<p>Categories:</p>	<table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: center; border-bottom: 1px solid black;">POSITIVE</th> <th style="text-align: center; border-bottom: 1px solid black;">NEUTRAL</th> <th style="text-align: center; border-bottom: 1px solid black;">NEGATIVE</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">75. Humorous/funny</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">76. Culturally unaware/do not participate in host culture activities</td> </tr> <tr> <td></td> <td style="text-align: center;">77. Religious</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">79. Stick together in a group/gangs</td> <td style="text-align: right;">78. Illegal behaviours (crime/drugs)</td> </tr> <tr> <td></td> <td style="text-align: center;">81. Domesticated/trad. female roles</td> <td style="text-align: right;">80. Disrespectful to women/sexist</td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">82. Spiteful/bitchy towards peers</td> </tr> </tbody> </table>	POSITIVE	NEUTRAL	NEGATIVE		75. Humorous/funny				76. Culturally unaware/do not participate in host culture activities		77. Religious			79. Stick together in a group/gangs	78. Illegal behaviours (crime/drugs)		81. Domesticated/trad. female roles	80. Disrespectful to women/sexist			82. Spiteful/bitchy towards peers
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		82. Spiteful/bitchy towards peers																				

APPENDIX D
FREQUENCIES OF
STEREOTYPE ASSIGNMENT IN
STUDY ONE

This table indicates raw data from Study One i.e. the number of participants who assigned the various 82 stereotypes to the six target groups (key of labels below)

Code	WG	WB	AG	AB	BG	BB	F _{ethnicity}	F _{gender}	F _{interaction}
1. Quiet	11	1	21	4	1	1	16.90 ^a	27.11 ^a	13.54 ^a
2. Loud/chatty	8	11	5	2	10	10	4.77	.00	1.17
3. Extroverted	2	5	0	0	3	1	5.67 ^a	.09	1.84
4. Quiet/passive ...	5	1	17	3	4	1	6.02 ^a	17.02 ^a	2.98
5. Confident	2	2	0	2	4	3	1.35	.14	.96
6. Low self-esteem ...	4	3	5	0	3	5	.50	1.69	2.23
7. Modest*	1	0	0	0	0	0	1.00	1.00	1.00
8. Arrogant	1	3	0	7	2	2	.56	1.83	.00
9. Happy ...	0	1	0	1	4	5	4.77	.69	.00
10. Sulky ...*	1	0	2	1	1	0	.52	5.85	2.54
11. Hardworking ...	21	13	30	26	7	2	27.88 ^a	6.45	.28
12. Unmotivated ...	3	10	2	5	6	17	4.49	13.51 ^a	1.73
13. Value education ...*	2	0	3	1	0	0	2.45	4.22	2.07
14. Devalue education ...*	0	1	0	0	2	2	3.23	.66	.69
15. Intelligent/more able	10	5	4	10	1	0	8.28 ^a	.05	3.57
16. Unintelligent/less able	2	2	2	2	5	5	1.30	.00	.00
17. Imaginative/creative*	4	0	1	0	0	0	2.40	4.79	2.40
18. Unimaginative ...*	0	1	0	0	0	0	1.00	1.00	1.00
19. Well behaved ...	11	4	7	1	0	0	11.68 ^a	10.33 ^a	5.36 ^a
20. Disruptive ...	1	17	0	5	4	17	12.63 ^a	22.69 ^a	6.18 ^a
21. Laid back ...*	1	0	2	0	2	3	.80	2.04	1.17
22. Aggressive/violent	2	16	0	7	1	15	5.86 ^a	28.75 ^a	3.07
23. Kind/caring	8	0	4	1	1	0	5.37 ^a	10.47 ^a	4.01
24. Bully/mean to others	2	6	0	0	2	4	5.10 ^a	2.64	1.42
25. Sociable ...	7	3	2	1	4	3	1.79	2.04	.65
26. Unsociable ...*	1	0	1	3	1	0	1.00	.00	1.00
27. Form last friendships*	1	2	0	0	0	0	3.11	.33	.33
28. Form short-lived friends *	2	1	0	0	0	0	4.22	1.00	1.00
29. Good with feelings ...*	1	1	1	1	0	1	1.00	.09	1.00
30. Bad with feelings ...*	2	1	1	2	1	1	.14	.00	.33
31. Polite ...	11	8	10	4	5	4	1.84	4.41	1.91
32. Impolite ...	4	10	0	6	5	6	2.12	4.52	2.84
33. Conform to authority ...	11	4	17	6	4	1	8.69 ^a	12.24 ^a	1.95
34. Disrespect authority ...	2	8	0	3	2	10	5.24 ^a	12.90 ^a	1.66
35. Honest ...*	2	1	2	2	2	1	.08	1.00	.49
36. Dishonest ...*	2	2	0	2	1	3	.74	2.75	.66
37. Attentive/listen well*	2	0	3	0	0	0	2.64	5.38	2.64
38. Inattentive ...*	1	4	0	2	2	2	.94	5.38	.74
39. Produce neat work ...	8	2	3	0	2	0	5.78 ^a	10.90 ^a	.65
40. Produce messy work ...*	0	2	0	1	0	2	.66	3.74	.66
41. Co-operative ...*	4	0	4	1	0	0	3.14	5.91	3.11
42. Competitive ...	3	4	0	3	1	2	1.41	1.19	.69
43. Mathematical ...	2	26	1	9	0	2	18.97 ^a	43.58 ^a	13.31 ^a
44. Poor at math ...	10	0	1	0	0	0	5.83 ^a	10.89 ^a	5.83 ^a
45. Good at language ...	20	3	3	1	2	0	16.09 ^a	17.07 ^a	6.54 ^a
46. Poor at language ...	2	13	4	2	0	0	12.38 ^a	6.88 ^a	5.19 ^a
47. Enjoy art/dance ...	7	1	4	0	5	6	2.97	3.74	3.84
48. Dislike art/dance ...*	0	3	0	1	0	1	.56	5.38	.56
49. Good at art/dance ...	3	0	5	1	19	19	12.89 ^a	2.98	.79
50. Poor at art/dance ...*	0	0	2	0	0	0	2.04	2.04	2.04
51. Athletic	1	13	0	9	20	36	25.52 ^a	42.85 ^a	.98
52. Unathletic*	3	0	0	2	0	0	2.64	.20	2.64
53. Enjoy sports/PE	1	21	0	11	2	5	5.64 ^a	33.35 ^a	9.53 ^a

(Appendix D cont.)

Code	WG	WB	AG	AB	BG	BB	Ethnicity F	Gender F	Interaction F
54. Dislikes sports/PE*	1	1	3	2	1	0	2.07	.50	.18
55. Clean/neat appearance*	2	3	1	1	0	0	2.40	.33	.33
56. Dirty/smelly ...*	1	1	2	2	1	2	.40	.33	.20
57. Physically attractive ...*	1	0	1	3	1	1	1.07	.33	.91
58. Unattractive*	0	0	0	0	1	0	1.00	1.00	1.00
59. Mix with other gender*	1	0	0	0	0	0	1.00	1.00	1.00
60. Segregate by gender*	0	2	0	2	0	0	2.07	4.22	2.07
61. Mix with other ethnicity*	0	0	1	0	0	0	1.00	1.00	1.00
62. Segregate by ethnicity*	0	0	2	4	1	1	2.93	1.00	1.00
63. Appearance unimportant*	0	1	0	0	0	0	1.00	1.00	1.00
64. Appearance important*	4	0	0	0	3	1	3.47	3.77	2.22
65. Leadership skills*	0	1	0	1	0	3	1.00	3.74	1.00
66. Poor leadership skills*	1	0	0	0	0	0	1.00	1.00	1.00
67. Achievement-oriented ...	2	0	3	6	0	0	2.89	.33	1.85
68. No ambition ...*	1	0	6	0	0	0	2.64	6.58	2.98
69. Positive family life	1	1	9	14	2	2	8.06 ^a	1.96	1.50
70. Negative family life	1	0	5	11	0	1	3.84	11.88 ^a	5.83 ^a
71. Dominant*	0	1	0	4	0	0	2.07	3.74	2.07
72. Submissive to males*	1	0	3	0	0	0	2.07	4.22	2.07
73. Culturally tolerant*	2	0	0	0	0	0	1.00	1.00	1.00
74. Culturally intolerant	3	7	1	4	3	1	3.84	2.88	4.83
75. Humorous/funny*	0	1	1	0	0	1	.00	.20	2.04
76. Culturally unaware ...*	0	0	4	2	1	1	2.40	1.00	1.00
77. Religious*	0	0	0	2	1	2	1.20	3.11	1.53
78. Illegal behaviours ...	1	2	0	1	1	6	2.01	7.82 ^a	1.48
79. Stick together in gangs ...	1	1	0	4	1	5	1.00	4.88	1.00
80. Disrespect women	0	2	1	14	0	2	8.29 ^a	14.19 ^a	5.48 ^a
81. Domesticated ...	8	1	23	0	3	0	15.50 ^a	40.81 ^a	14.86 ^a
82. Spiteful/bitchy ...	15	1	1	0	2	0	10.09	14.19 ^a	6.90 ^a

Labels:

WG = White Girl target group

WB = White Boy target group

AG = Asian Girl target group

AB = Asian Boy target group

BG = Black Girl target group

BB = Black Boy target group

* frequencies removed because total $f \leq 10$ across all target groups

^a $<.001$

APPENDIX E
STIMULI USED IN THE EXPLICIT
STEREOTYPE MEASURE

How typical do you think the following behaviour is of [target group: Asian girls/Asian boys/white English girls/white English boys]?

1 2 3 4 5 6 7
not at all typical Very typical

- 1. Quiet
- 2. Passive
- 3. Hardworking
- 4. Well behaved
- 5. Obedient
- 6. Good at sciences
- 7. Domesticated
- 8. Encouraged by family
- 9. Spoilt
- 10. Disrespect women
- 11. Intelligent
- 12. Attentive
- 13. Good at arts
- 14. Spiteful
- 15. Unmotivated
- 16. Disruptive
- 17. Aggressive
- 18. Disobedient
- 19. Talkative
- 20. Athletic
- 21. Like sports
- 22. Overactive
- 23. Temper tantrums
- 24. Fidgety
- 25. Inattentive

APPENDIX F
PILOT QUESTIONNAIRE USED IN
STUDY THREE

Hi,

Thank you for agreeing to take part in this study. It should not take more than 3 minutes to complete.

This questionnaire forms part of a PhD thesis that is looking at social judgements.

The first page of this document asks you to rate 18 traits in terms of their negativity/positivity by circling your response:

	Very negative			Neutral			Very positive	
e.g. Happy	1	2	3	4	5	6	7	

The second and third pages ask you to think about ethnic stereotypes that exist in society. With these thoughts in mind, you are then asked to rate the typicality of the same 18 traits for 2 different ethnic groups:

	Very atypical			Neutral			Very typical	
e.g. Happy	1	2	3	4	5	6	7	

As you will be asked to rate the typicality of these traits based on general stereotypes, these responses will not reflect your personal opinion.

Your responses will remain confidential and anonymous at ALL times.

Once again, thank you for participating. I shall collect the completed questionnaires by Thursday evening (17th May)
Shabnam Khan.

BELOW ARE A NUMBER OF TRAITS THAT COULD BE USED TO DESCRIBE PEOPLE, IN GENERAL. PLEASE INDICATE HOW POSITIVE OR NEGATIVE YOU CONSIDER EACH TRAIT TO BE.

TRY NOT TO SPEND TOO MUCH TIME ON EACH ITEM – JUST INDICATE YOUR INITIAL REACTION

1	2	3	4	5	6	7
Very negative	Fairly negative	A little bit negative	Neutral	A little bit positive	Fairly positive	Very positive

	<u>VN</u>							<u>VP</u>
1. Stupid	1	2	3	4	5	6	7	7
2. Warm	1	2	3	4	5	6	7	7
3. Hardworking	1	2	3	4	5	6	7	7
4. Confident	1	2	3	4	5	6	7	7
5. Meek	1	2	3	4	5	6	7	7
6. Mean	1	2	3	4	5	6	7	7
7. Cold	1	2	3	4	5	6	7	7
8. Assertive	1	2	3	4	5	6	7	7
9. Clever	1	2	3	4	5	6	7	7
10. Disruptive	1	2	3	4	5	6	7	7
11. Kind	1	2	3	4	5	6	7	7
12. Timid	1	2	3	4	5	6	7	7
13. Obedient	1	2	3	4	5	6	7	7
14. Lazy	1	2	3	4	5	6	7	7
15. Outgoing	1	2	3	4	5	6	7	7
16. Careless	1	2	3	4	5	6	7	7
17. Loner	1	2	3	4	5	6	7	7
18. Attentive	1	2	3	4	5	6	7	7

PLEASE INDICATE HOW TYPICAL PUBLIC OPINION CONSIDERS EACH TRAIT
TO BE FOR:

ASIAN CHILDREN (from Indian subcontinent)

TRY NOT TO SPEND TOO MUCH TIME ON EACH ITEM – JUST INDICATE YOUR
INITIAL REACTION

1	2	3	4	5	6	7
Very atypical	Fairly atypical	A little bit atypical	Neutral	A little bit typical	Fairly typical	Very typical

		<u>VA</u>						<u>VT</u>
1. Stupid	.....	1	2	3	4	5	6	7
2. Warm	.....	1	2	3	4	5	6	7
3. Hardworking	.....	1	2	3	4	5	6	7
4. Confident	.....	1	2	3	4	5	6	7
5. Meek	.....	1	2	3	4	5	6	7
6. Mean	.....	1	2	3	4	5	6	7
7. Cold	.....	1	2	3	4	5	6	7
8. Assertive	.....	1	2	3	4	5	6	7
9. Clever	.....	1	2	3	4	5	6	7
10. Disruptive	.....	1	2	3	4	5	6	7
11. Kind	.....	1	2	3	4	5	6	7
12. Timid	.....	1	2	3	4	5	6	7
13. Obedient	.....	1	2	3	4	5	6	7
14. Lazy	.....	1	2	3	4	5	6	7
15. Outgoing	.....	1	2	3	4	5	6	7
16. Careless	.....	1	2	3	4	5	6	7
17. Loner	.....	1	2	3	4	5	6	7
18. Attentive	.....	1	2	3	4	5	6	7

PLEASE INDICATE HOW TYPICAL PUBLIC OPINION CONSIDERS EACH TRAIT
TO BE FOR:

WHITE BRITISH CHILDREN

TRY NOT TO SPEND TOO MUCH TIME ON EACH ITEM – JUST INDICATE YOUR
INITIAL REACTION. TRY TO BE AS HONEST AND OPEN AS POSSIBLE

1	2	3	4	5	6	7
Very atypical	Fairly atypical	A little bit atypical	Neutral	A little bit typical	Fairly typical	Very typical

	<u>VA</u>						<u>VP</u>
1. Stupid	1	2	3	4	5	6	7
2. Warm	1	2	3	4	5	6	7
3. Hardworking	1	2	3	4	5	6	7
4. Confident	1	2	3	4	5	6	7
5. Meek	1	2	3	4	5	6	7
6. Mean	1	2	3	4	5	6	7
7. Cold	1	2	3	4	5	6	7
8. Assertive	1	2	3	4	5	6	7
9. Clever	1	2	3	4	5	6	7
10. Disruptive	1	2	3	4	5	6	7
11. Kind	1	2	3	4	5	6	7
12. Timid	1	2	3	4	5	6	7
13. Obedient	1	2	3	4	5	6	7
14. Lazy	1	2	3	4	5	6	7
15. Outgoing	1	2	3	4	5	6	7
16. Careless	1	2	3	4	5	6	7
17. Loner	1	2	3	4	5	6	7
18. Attentive	1	2	3	4	5	6	7

Age:

Gender:

Ethnicity:

APPENDIX G
VIGNETTES USED IN STUDY FOUR

Disruptive Asian child (DA):

Imran is a 9 year old boy. Imran likes to run around with his friends, which usually makes it hard for him to line up to go back into the classroom. He usually pushes to the front of the line and does not sit down in his seat in the classroom. The teacher often has to tell him off. Even then, he is very fidgety and talkative in his seat. Imran does not show much interest in school work, especially harder tasks, and would rather be playing with toys or talking about football. He does not tend to follow written or verbal instructions as he is easily distracted, and so has to ask for help. When the teacher takes time out specifically for him, he does not complete the academic tasks he's been set. However, when Imran does hand in his work, it can contain silly mistakes. If Imran has been told to play, he can be loud with peers and can lose things. He is bored easily, often moving around to find something to entertain himself with.

Disruptive white British child (DW)

John is a 9 year old boy. John likes to run around with his friends, which usually makes it hard for him to line up to go back into the classroom. He usually pushes to the front of the line and does not sit down in his seat in the classroom. The teacher often has to tell him off. Even then, he is very fidgety and talkative in his seat. John does not show much interest in school work, especially harder tasks, and would rather be playing with toys or talking about football. He does not tend to follow written or verbal instructions as he is easily distracted, and so has to ask for help. When the teacher takes time out specifically for him, he does not complete the academic tasks he's been set. However, when John does hand in his work, it can contain silly mistakes. If John has been told to play, he can be loud with peers and can lose things. He is bored easily, often moving around to find something to entertain himself with.

Well-behaved Asian child (WA)

Imran is a 9 year old boy. When Imran is in the school classroom, he is determined to do well and so he tries hard at his school work. He is able to maintain his concentration, despite other children's antics, and he checks through his work carefully before he hands it in. He also sees his academic tasks through to the end, however difficult or demanding they might be. Whenever the teacher is talking to the class or specifically to him, Imran listens closely. He sits nicely at his appropriately equipped desk, and is careful not to disturb other children either by talking or by moving about too much. Imran does not interrupt the teacher with questions or bad behaviour – in fact, he is shy to participate in question sessions with the whole class. He tends to know what he needs to do, only asking questions when he really needs to.

Well-behaved white British child (WW)

John is a 9 year old boy. When John is in the school classroom, he is determined to do well and so he tries hard at his school work. He is able to maintain his concentration, despite other children's antics, and he checks through his work carefully before he hands it in. He also sees his academic tasks through to the end, however difficult or demanding they might be. Whenever the teacher is talking to the class or specifically to him, John listens closely. He sits nicely at his appropriately equipped desk, and is careful not to disturb other children either by talking or by moving about too much. John does not interrupt the teacher with questions or bad behaviour – in fact, he is shy to participate in question sessions with the whole class. He tends to know what he needs to do, only asking questions when he really needs to.

APPENDIX H
QUESTIONNAIRE USED TO RATE THE
VIGNETTES IN STUDY FOUR

1	4	7
Far Below Avg.	Avg.	Far above avg.

1. Compared to other children, how does the child give attention to detail and avoid careless mistakes?
2. Compared to other children, how does the child sustain attention on tasks or play activities?
3. Compared to other children, how does the child listen when spoken to directly?
4. Compared to other children, how does the child follow instructions and finish school work or chores?
5. Compared to other children, how does the child organise tasks and activities?
6. Compared to other children, how does the child engage in tasks that require sustained mental effort?
7. Compared to other children, how does the child keep track of things necessary for activities?
8. Compared to other children, how does the child ignore extraneous stimuli?
9. Compared to other children, how does the child remember daily activities?
10. Compared to other children, how does the child sit still (controls hand or feet movements, squirming)?
11. Compared to other children, how does the child stay seated (when required to by class or social rules)?
12. Compared to other children, how does the child control motor activity (stops self from inappropriate running or climbing)?
13. Compared to other children, how does the child play quietly (keep noise level reasonable)?
14. Compared to other children, how does the child settle down and rest (control constant activity)?
15. Compared to other children, how does the child control verbal activity (control excessive talking)?
16. Compared to other children, how does the child reflect on questions (control blurting out answers)?
17. Compared to other children, how does the child await his turn (stands in line and takes turns)?
18. Compared to other children, how does the child enter into conversations and games without interrupting or intruding?
19. How quiet is this child?
20. How reserved is this child?
21. How hardworking is this child?
22. How disruptive is this child?
23. How disobedient is this child?
24. How attentive is this child?
25. How talkative is this child?
26. How inattentive is this child?
27. How well behaved is this child?
28. How obedient is this child?
29. How overactive is this child?
30. How unmotivated is this child?

NB:-

- Items 1-18 = SNAP questionnaire
- Items 19/20/21/24/27/28 = Asian stereotype-based items
- Items 22/23/25/26/29/30 = White stereotype-based items

31. What ethnicity is this child most likely to be?

1	2	3	4
Caucasian (White)	South Asian (Indian subcontinent)	Far East Asian	Afro-Caribbean

33. Is this child's behaviour representative of this ethnicity?

1	6
Not at all representative	Very representative

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