Ethnic Discrimination and Mood

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Declaration

This thesis submitted for the degree of doctorate in clinical psychology entitled 'Ethnic discrimination and depression' is based on work conducted by the author in the Department of Clinical Psychology at the University of Leicester between September 2003 and September 2006. All of the work recorded in this thesis is original otherwise acknowledged in the text or by references.
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A big thank-you and love to Denise for keeping the boat afloat and for putting up with me. To my beautiful and cheeky children Dylan and Abigail: “I’m going to spend more time with you”. Thanks to my wider family for all their love and support. To my new niece, Madeleine, I will visit again! I would also like to express my appreciation to Steve Allan and Paul Gilbert for their advice and support, and to Jon Crossley and Chris Stowers for being understanding.
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1. Abstract

The current thesis comprises three sections relating to ethnic discrimination and mood. The first is a Literature Review on the relationship between discrimination and depression in Black and minority ethnic (BME) communities. The second is a Research Report, which considers the utility of the concepts of external shame and belongingness in explaining the relationship between ethnic discrimination and mood. The third is a Critical Reflection on the process of the research.

Literature Review: The review found evidence of a cross-sectional association between discrimination and depression, but there was a lack of methodologically robust prospective studies. Subtle forms of discrimination were found to be as important as blatant forms. Ethnic identity was found to be a generally protective factor in the relationship between discrimination and depression. The process of perceiving discrimination was found to be complex and related to ethnic identity. The utility of considering depression in terms of positive and negative affect was recommended.

Research Report: The Research Report is a cross-sectional study that used self-report measures. The study sampled White British (WB) and BME students. The results supported a social ranking model of the relationship between discrimination and mood. External shame was found to mediate the relationship between ethnic discrimination and negative affect for the BME and WB groups and with positive affect for the BME group. The BME group was found to report a greater frequency of ethnic discrimination than the WB group. Ethnic discrimination had a greater psychological effect on the BME group than the WB. The results did not support belongingness to ethnic community mediating the relationship between discrimination and mood for either group.

Critical reflection: Reflections were made on key areas of the research process, including the decision to conduct research on ethnic discrimination, the design of the research, key difficulties and decisions in completing the research, the emotional salience of the topic to the researcher and the use of supervision.
Section 1: Literature Review

A Review of the Research Literature on the Relationship between Discrimination and Mood in Black and Minority Ethnic Communities
1. Abstract

**Purpose:** The aim of the Literature Review was to examine the empirical evidence on discrimination and depression within Black and minority ethnic (BME) communities.

**Methods:** A systematic search strategy was conducted using the key terms of discrimination, ethnicity and depression in several psychological, sociological and medical abstract databases.

**Results:** 26 original studies were found to address the topic of discrimination and depression. Only 3 of these studies were based in the UK and only 2 used longitudinal designs. There was evidence of a cross-sectional association between discrimination and depression, however, there was a lack of methodologically robust longitudinal studies. Subtle and daily hassles seemed to be as important as blatant discriminatory acts. Cross-culturally applying the concept of depression was discussed. The theoretical framework of Clark and Watson (1991) for understanding depression in terms of positive and negative affect was outlined. Ethnic identity was shown to be an important and generally protective factor in the relationship between discrimination and depression. The act of perceiving discrimination was highlighted as a complex process and studies examining discrimination and depression had not considered this complexity.

**Conclusions:** The evidence suggested that discrimination and ethnic identity are significant factors when considering depression in BME communities. Clinical implications were discussed in terms of direct therapeutic work and wider services issues. The review highlighted the need for further research and suggested theoretical perspectives, such as social ranking theory, to help guide this research.
2. Introduction

The UK Department of Health has proposed a plan to deliver equitable services to meet the mental health needs of Black and minority ethnic (BME) communities, including the delivery of psychological therapies (DOH, 2003 a, b; 2004). Cultural awareness is a core competency in the continued professional development of Clinical Psychologists (DCP, 2001). The following review explores one potentially important aspect in the mental health of BME communities, which is the relationship between discrimination and low mood. There have been literature reviews on discrimination and health (Williams, Neighbors & Jackson, 2003) and on discrimination and the mental health of African-Americans (Williams & Williams-Morris, 2000), however the current review considers mood and depression in more depth and emphasizes BME communities within the UK.

2.1 Aims and Process of Review

The current review conceives low mood as on a continuum with depression (Judd & Akiskal, 2000), therefore, literature that considers mood is used to help understand depression. However, the core articles reviewed focus upon depression. Overall, the aim of the current literature review was to consider discrimination and depression within BME communities. Studies were included if they either measured racial/ethnic discrimination or any type of discrimination that was interpretable for a BME sample. The main search strategy used the combination of terms, 'discrimination', 'ethnicity' and 'depression' with MEDLINE, Psychinfo, Sociological Abstract and Social Science Citation Index databases. Articles were then manually sorted so to include relevant empirical studies. The reference section of key articles was searched for any articles pertaining to the above terms that were not captured in the database search. Depression was not defined specifically, however articles were restricted to those measuring depression using a diagnostic system or through a

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1 The review draws on research from further afield than the UK, with the caveat that cultural and historical differences between the UK and other countries may restrict generalisation.

2 Alternative terms included: racism, anti-Semitism, 'race', depressive symptoms.
symptom subscale (scales with less than four items were not included). Exclusions were made on manic-depression, psychotic related depression and clear organic related depression. Further, age was restricted to late adolescence and adulthood.

3. Background

3.1 Definitions: Race and Ethnicity

The continuing use of the term ‘race’ and its utility is controversial (see UNESCO, 1967). Physical anthropologists do not recognise the validity of ‘race’ (e.g. Brace, 1964), geneticists have shown that there is vastly more genetic variation within ‘races’ as between them (Jones, 1996), and sociologists have discussed how the term ‘race’ is not a scientific definition of a genetic reality but a social construction (Fenton, 1999; Pilkington, 2003). Further, historical accounts argue that the science of race has been used in the subordination of groups (Malik, 1996).

The use of the term ethnicity has come to supersede race, partially due to its less controversial use and history (Fenton, 1999). Fenton (1999) emphasised ancestry, culture and language in his discussion of ethnicity. Smaje (1995) conceived ethnicity as encompassing all the ways in which people differentiate themselves from each other, including but not exclusive to phenotypic differences. However, the operationalisation of ethnicity into categories and their use in ethnic statistics has been criticised on many different grounds (e.g. Ahmad & Sheldon, 1991; Booth, 1988), and caution expressed regarding the definition of ethnic groups by more powerful others (Hillier & Kelleher, 1996). Whilst the current review does not focus on these issues, it should be borne in mind that ethnic categories are relatively crude and can mask a more fluid and diverse reality (Nagel, 1994; Smaje, 1995).³ It should be noted that everyone has a cultural and ethnic affiliation (including majority ethnic groups),

³ LaVeist (1996) argued that researchers should make explicit what they envision race/ethnic categories to represent and should directly measure factors such as culture, biology and discrimination, rather than using race/ethnic categories as proxy variables.
and therefore all people can feel discriminated against due to their ethnicity. However, a key difference is that minority ethnic groups are generally more stigmatised and disenfranchised than majority ethnic groups (Jones, 1997). 

3.2 BME Groups in the UK

Using data from 2001 census, the Office for National Statistics (2004) indicated that the majority of the UK population were White, with the remaining 7.9% belonging to "other ethnic groups". Further, White Irish people account for around 1% of the population of Britain.

Comparison of census data from 1991 to 2001 indicates that a growing number of the population in the UK were of an ethnicity "other than White" (figures were only given as "other than White"). This would indicate a growing and significant diversity in the UK population that may have implications for Clinical Psychology and the application of psychological knowledge.

3.3 The Nature of Racism and Discrimination

Dion (2001) defined prejudice and discrimination in the following manner: "Prejudice usually refers to negative attitudes toward disfavoured groups and their members while discrimination is unfair behaviour or unequal treatment accorded others on the basis of their group membership or possession of some arbitrary trait." (p. 2). Williams (1996) suggested that although racism includes prejudice and discrimination as discussed by Dion (2001), fundamental to racism is an ideology. A racist ideology is the belief in the superiority of one group (or 'race') over another, which then entitles the one to dominate the other (Bhugra & Bhui, 1999). Richardson and Lambert (1985) suggested that as well as ideology and

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4 People from minority and majority ethnic groups may also feel stigmatised on other grounds, such as gender, sexuality, but the current focus will be on ethnicity.

5 See Weich et al. (2004) and Nazroo (1997) for UK nationally representative data, which considers the prevalence of depression in BME communities
individual discrimination, a key aspect of racism is the nature of social structures (institutional racism).

Further, Dovidio & Gaertner (1986) suggested that contemporary prejudice, which they termed as aversive racism, is subtle, indirect and no longer blatant. There is a large theoretical and empirical basis considering more subtle forms of discrimination and prejudice (e.g. McConahay, 1986; for review see Dovidio & Gaertner, 2004; for a British perspective see Hodson, Hooper, Dovidio & Gaertner, 2005). Research within the aversive racism framework provides evidence of aversively prejudiced people holding explicitly positive attitudes towards minority groups, but implicitly⁶ holding negative attitudes, which impacts upon recipients in interactions (e.g. Devine, Evett & Vasquez-Suson, 1996; Dovidio, Kawakami & Gaertner, 2002). Cose (1993) has argued that such subtle forms of racism can be more harmful than blatant forms.

As discrimination is subtle and ambiguous this causes difficulties for stigmatised individuals in deciding whether an event is racially motivated or not, therefore, the term 'perceived discrimination' has become popular in the literature. Discrimination as perceived by stigmatised individuals will be the focus of the current review and it is acknowledged that this is only one area of discrimination that is potentially related to depression (Jones, 1997, provides a comprehensive model of racism. The model describes how the components of individual, institutional and cultural racism interact and influence each other across time⁷).

3.4 Racism and Discrimination in the UK

There is evidence of racism against BME people within a wide range of domains of UK society. There has been extensive research data indicating racial discrimination and

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⁶ People might be unaware of their own prejudice
⁷ Currently, a limitation of the model is that not all the linkages between the components have been tested or fully specified.
prejudice in employment decisions (e.g. Brown & Gay, 1985; Iganski & Mason, 2002; Noon, 1993). There is evidence of racism within the educational system (e.g. Cole, 2004; Connolly, 1998; Gilborn, 1995; Gilborn & Mirza, 2000) and within higher education, 'older' (pre-1992) Universities have been found to favour white candidates from a pool of similarly qualified applicants (Shiner & Modood, 2002). The MacPherson report (1999) argued that the police force is institutionally racist. Crucially, there is evidence of inequality, discrimination and prejudice within the NHS and mental health services, which includes services provided to people who are depressed (e.g. DOH, 2003a, b; Townsend, Davidson & Whitehead, 1990; Webbe, 1998).

A recent British Crime Survey found 106,000 racially motivated incidents against BME groups in 2002 / 03 (Salisbury & Upson, 2004). Virdee (1995) has argued that such crime figures fail to capture lower level racial harassment. Virdee (1997) reported data from a large nationally representative community study of BME people in the UK, which showed that 12% of the sample reported verbal abuse or other forms of insulting behaviour in the preceding 12 months. However, this question was not designed to capture more subtle forms of discrimination discussed previously (e.g. aversive racism), therefore the number of people experiencing this subtle form of discrimination is likely to be higher than that reported by Virdee (1997). It has also been argued that these subtle forms of discrimination (micro-aggressions) have a greater impact than more blatant forms of discrimination (Essed, 1991; LaVeist, 1996; Pierce, 1988). Therefore, Virdee (1997) has neglected subtle types of discrimination, which potentially have the greatest psychological impact.
4. Empirical Data on Discrimination and Depression

4.1 Cross-Sectional Data on Discrimination and Depression

Table A (Appendix B) summarises key design features of the 26 research studies focussed on perceived discrimination and depression in BME communities. Of these 26 studies, 24 are cross-sectional. The broad results of these cross-sectional studies are as follows: 21 studies found a moderate sized positive association between discrimination and depression (Abouguendia & Noels, 2001; Cassidy, O’Connor, Howe & Warden, 2004; Contrada et al., 2001; Finch, Kolody & Vega, 2000; Gaudet, Clement & Deuzeman, 2005; Gold, 2004; Jackson, Hogue & Phillips, 2005; Karlsen & Nazroo, 2002; Karlsen, Nazroo, McKenzie, Bui & Weich, 2005; Klonoff, Landrine & Ullman, 1999; Landrine & Klonoff 1996; Mossakowski, 2003; Noh, Beiser, Kaspar, Hou & Rummens, 1999; Noh & Kaspar, 2003; Pernice & Brook, 1996; Ren, Amick & Williams, 1999; Salgado de Snyder, 1987; Sellers, Caldwell, Schmeelk-Cone & Zimmerman, 2003; Siefert, Bowman, Heflin, Danziger & Williams, 2000; Turner & Avison, 2003; Whitbeck, McMorris, Hoyt, Stubben & Lafromboise, 2002). Two studies did not find an association (Moghaddam, Taylor, Ditto, Jacobs & Bianchi, 2002; Utsey & Payne, 2000). One study found that the significant association between discrimination and depression disappeared after controlling for other factors (Prelow, Danoff-Burg, Swenson & Pulgiano, 2004). Overall, the majority of research findings have shown a moderate association between discrimination and depression.

Many of these studies used multiple regression techniques and controlled for a wide variety of possible confounding factors such as demographics, socio-economic status, acculturation, acculturative stress, social support, childhood events and abuse, a wide range of social and environmental factors, psychiatric comorbidity, life events and generic stress.

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8 Table A also includes a further two studies reanalysing data (Cassidy, O’Connor, Howe & Davidson, 2005; Bhui et al., 2005).
9 This varied from approximately a small to a medium-large effect size.
10 This study considered Common Mental Disorder (depression and anxiety), however, it was included due to being a nationally representative sample of England.
(Contrada et al., 2001; Finch et al., 2000; Karlsen & Nazroo, 2002; Klonoff et al., 1999; Landrine & Klonoff, 1996; Mossakowski, 2003; Noh et al., 1999; Noh & Kaspar, 2003; Pernice & Brook, 1996; Ren et al., 1999; Siefert et al., 2000; Turner & Avison, 2003; Whitbeck et al., 2002). Therefore, the significant positive association between discrimination and depression is not easily explained by confounding factors. Only one study by Prelow et al. (2004) found that the association between discrimination and depression disappeared after controlling for ecological risk factors and neighbourhood disadvantage. However, this study used a student population, did not specify the internal consistency of the discrimination measure used, and removed one item of the depression measure post hoc, thereby bringing both the result and its generalisability into question.

A limitation of the cross-sectional studies (Table A) is their reliance upon quantitative self-report instruments to measure discrimination and depression. This restricted range of methodology limits the depth in which the relationship between discrimination and depression can be understood. The use of alternative methodology may have allowed a greater level of understanding. For example, a diary methodology, where participants were asked to record incidents of discrimination and mood/depressive symptoms (quantitatively and qualitatively) would have added another level of analysis in considering discrimination and depression.

4.2 Cross-sectional Studies: Generalisability of Sample

Okazaki and Sue (1995) argue that a key weakness with studies considering ethnic minority populations has been limitations in sampling procedures and descriptions of samples. The previously reviewed studies (see Table A) vary in their ability to generalise to a wider population, due to the nature of the sample. This is particularly pertinent to BME communities in the UK as only three of the studies were based in the UK (Cassidy et al., 2004; Karlsen & Nazroo, 2002; Karlsen et al., 2005). Of the UK studies, two used nationally

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11 These studies will also be critiqued in subsequent sections
representative samples (Karlsen & Nazroo, 2002; Karlsen et al., 2005) and one used a sample of Chinese, Indian and Pakistani people living in Glasgow (Cassidy et al., 2004). Of the 24 studies with a cross-sectional design, the majority (14) were based in the USA and 10 of these included African Americans. Therefore, these studies should only be cautiously generalised to BME communities in the UK.

Of the 21 studies that found an association between discrimination and depression, 14 had limited generalisability. This was due to limitations in the sampling procedure (e.g. low response rate, convenience sample, potential systematic biases in sampling) and/or the sample being restricted in range (e.g. students or an overly defined sample within the ethnic group) (Abouguendia & Noels, 2001; Cassidy et al., 2004; Contrada et al., 2001; Gaudet et al., 2005; Gold, 2004; Jackson et al., 2005; Landrine & Klonoff 1996; Noh & Kaspar, 2003; Pernice & Brook, 1996; Sellers et al., 2003; Siefert et al., 2000; Turner & Avison, 2003; Salgado de Snyder, 1987; Whitbeck et al., 2002). The three studies that did not find a significant association (Moghaddam et al., 2002; Prelow et al., 2004; Utsey & Payne, 2000) had similar limitations in their sampling procedures.

The other seven studies followed more robust sampling procedures. Finch et al. (2000) used a fully probabilistic, stratified, multistage cluster sampling design. Karlsen and Nazroo (2002) used a nationally representative group of the UK and Karlsen et al. (2005) a representative group of England. Klonoff et al. (1999) used Census information to contact every home in ten randomly selected Census tracts, however the study did not specify the response rate. Mossakowski (2003) used a stratified probability sample and obtained a high response rate of 78%. Ren et al. (1999) used a nationally representative sample of African Americans and White Americans (using a stratified probability sample with an overall response rate of 76%). Noh et al. (1999) used a 1 in 3 probability sample of refugees settling
in Vancouver. The 10-year follow-up had an overall 62.5% retention rate\textsuperscript{12}, which is reasonable given the follow-up period, however, there were significant differences in attrition for marital status. Finally, Kessler, Mickelson and Williams (1999)\textsuperscript{13} have reported nationally representative data from the USA on 3032 adults (an overall 60.8% response rate), which found a significant positive association between discrimination and depression.

In summary, many of the cross-sectional studies had limited generalisability, due to either limited sampling procedures or range restrictions within the sample. However, there were studies that were more generalisable. There has been a lack of research on discrimination and depression within the UK, although the studies by Karlsen and Nazroo (2002) and Karlsen et al. (2005) used representative samples. Overall, the cross-sectional data suggests a moderate strength positive association between discrimination and depression. This association was despite a lack of uniformity in the measurement of discrimination and depression (see Section 5, p23) and the finding was not easily explained by confounding factors. However, the main weakness of the cross-sectional studies was the inability to draw causality between discrimination and depression.

4.3 Longitudinal Studies

Brown et al. (2000) and Jackson et al. (1996)\textsuperscript{14} analysed longitudinal panel data from Black Americans and found a prospective link from racial discrimination to psychological distress. Further, Brown et al. (2000) found distress or depression at the first time point did not prospectively effect the reporting of discrimination at the second time point. This means that reverse causality (distress / depression affecting reports of discrimination at baseline and follow-up) does not appear to explain the prospective effect of discrimination on

\textsuperscript{12} Discrimination and depression were measured at this time-point.
\textsuperscript{13} This study was not reported in Table A, as the majority of respondents were non-Hispanic White.
\textsuperscript{14} Both studies are from the same prospective research design, but used data collected from different time points.
psychological distress. However, Brown et al. (2000) did not find a prospective effect of discrimination on depression\textsuperscript{15}.

The main limitations of the Brown et al. (2000) study was that only a single question was used to measure discrimination and both depression and discrimination were only recorded in a binary manner (presence or absence). This lack of potential variance on the two factors limited the possibility of finding a prospective link between discrimination and depression\textsuperscript{16}. These limitations may have also led to the study to being unable to find a significant cross-sectional association between discrimination at either time point, which contrasts with the cross-sectional studies considered earlier where the majority found an association. This suggests that the study was not powerful enough to find a longitudinal association from discrimination to depression, even if it existed.

Pavalko, Mossakowski and Hamilton (2003) presented longitudinal data regarding work-based discrimination and American women’s physical and mental health, including depression. The study had a retention of 60.9\% over 20 years, and out of the remaining 3094, the analysis was performed on 1,778 women who had worked for at least two weeks between the two collection points in 1985 and 1989. Around three quarters of this sample were White and a quarter Black. A contemporary and prospective association was found from discrimination to depressive symptoms for the White subgroup, but not the Black subgroup. The study had two main limitations. Firstly, discrimination and depression were analysed as categorical variables, restricting the power of the analysis. Secondly, its generalisability to other groups is limited as it sampled employed females between the ages of 30-44 at onset of the study.

\textsuperscript{15} Jackson et al. (1996) did not measure depression.

\textsuperscript{16} Mirowsky (1994) demonstrated that the social causes (e.g. racial discrimination) of mental health problems are better detected using interval scales that do not attenuate meaningful variance.
In summary, there is prospective evidence for discrimination affecting psychological distress, which does not appear to be affected by reverse causality. Despite this, the longitudinal studies do not provide prospective evidence for the effect of discrimination on depression. However, the absence of methodologically rigorous longitudinal evidence is not evidence of absence of a prospective association between discrimination and depression.

5. Issues in Measuring Discrimination and Depression

5.1 Measurement of Discrimination

Utsey’s (1998) review of instruments measuring self-reported racism notes that measures appear to have utility, but require further psychometric scrutiny. Brown (2001) shows that the measurement of discrimination is multi-faceted and the emphasis of an instrument influences associations with other psychological variables. Both reviews are limited as they are selective in the measures reviewed and are specific to African Americans. The following gives a general overview regarding the technology of measurement of discrimination used in the research considering discrimination and depression (see Table A\(^{17}\)). The measures used in these studies appear to vary on several factors, in terms of:

1. The specificity of discrimination measured, for example only ethnic/racial discrimination (e.g. Sellers et al., 2003) or including other types of discrimination (e.g. Turner & Avison, 2003)\(^{18}\)

2. The number of items used to assess discrimination, from just one question (e.g. Noh et al., 1999), to multiple items and subscales (e.g. Klonoff et al., 1999).

3. Whether discrimination was measured on an interval scale (e.g. Abouguendia & Noels, 2001) or recorded in a binary manner (e.g. Brown et al., 2000)

4. The period of time covered in assessing the discrimination, from the previous month (Brown et al., 2000), lifetime (e.g. Mossakowski, 2003), or non-specific / general frequency (e.g. Cassidy et al., 2004)

\(^{17}\) Table A includes details of the discrimination measures.
\(^{18}\) This is partially an artefact of how studies were selected for the literature review.
5. The type of discrimination measured, from daily hassles (e.g. Mossakowski, 2003), major life events (e.g. Turner & Avison, 2003), to perceptions of employers as discriminatory (e.g. Siefert et al., 2000).

The variability of the discrimination measures detailed above makes it difficult to compare studies considering discrimination and depression (see Table A). Further, only a limited number of studies employed more than one measure of discrimination, making it difficult to know what aspect of discrimination (e.g. major life events, or daily hassles) had the strongest relation and influence on depression. Further, studies using multiple measures of discrimination did not necessarily use instruments that were easily comparable. This is important as the way in which discrimination is measured may have a major effect on whether an association between discrimination and depression is found (e.g. whether discrimination is recorded on an interval or binary scale).

Subtle forms of discrimination have been suggested to have as great effect on a person’s psychology as blatant acts of discrimination (e.g. LaVeist, 1996). Four studies (Abouguendia & Noels, 2001; Mossakowski, 2003; Sellers et al., 2003; Turner & Avison, 2003) looked specifically at daily hassles and all found a positive association with depression. These four studies lend support to the notion that discrimination does not have to be overt or blatant to be linked to depression.

Despite variability in the measurement of discrimination, the data generally supports a relationship between discrimination and depression. Furthermore, measures have generally improved and have moved away from single items to multiple items with good internal consistency (e.g. Noh & Kaspar, 2003). In addition, studies now include measures of major life events and daily hassles (e.g. Turner & Avison, 2003) and take into account the appraisal of the discrimination (e.g. Klonoff et al., 1999). However, in line with Utsey’s (1998) review,
the measures of discrimination used in the studies within Table A (Appendix B) need to undergo further psychometric assessment. This is particularly important if the relationship between discrimination and depression is to be compared between different ethnic groups because metric equivalence\(^1\) cannot be assumed.

5.2 Measurement of Depression

5.2.1 Category fallacy

The category fallacy is the application of psychiatric categories derived in the West that may not have coherency in another culture (Kleinman, 1987; Krause, 1989). Mezzich et al. (1999) argue that DSM-IV (APA, 1994), whilst attempting to incorporate culture into diagnostic criteria, does not do so adequately and continues to be based upon universalistic assumptions of mental health difficulties. Further, Jadhav (1996) has described the historical and regional development of ‘Western depression’, and questioned whether the concept is universally applicable. Therefore, consideration of the effect of discrimination on depression is further complicated when considering ethnically diverse communities. There has been limited research on the category fallacy\(^2\).

Fenton and Sadiq-Sangster (1996) found an expression within Asian–Pakistani women ‘thinking too much in my heart’, which correlated strongly with many Western symptoms of depression, but it did not correlate with all standard Western symptoms. Further, they found that ‘thinking too much in my heart’ had far less an emphasis on ‘self’ than the Western concept of depression. Overall, the research suggests that cross-culturally, there are common elements in mental distress (including ‘depression’); however, the form distress takes might be different between cultures.

\(^1\) Metric equivalence refers to the assumption that the same metric can be used to measure the same concept in two or more cultures.

\(^2\) Lewis-Fernandez and Kleinman (1994) suggest that current professional theories of mental health are enmeshed with individualistic assumptions based upon unexamined Western cultural notions. This review is limited as it is only a selective and relatively brief overview of the area.
Chakraborty & McKenzie (2002) suggested that quantitative methods on their own are inadequate to study the validity of European illness models to other cultural groups. In the UK, Nazroo, Fenton, Karlsen and O'Connor (2002) used a qualitative research design, content analysis, to consider culture bound syndromes. Their research did not support the stronger form of the category fallacy as they revealed that idioms of distress and discussions of cause were similar across ethnic groups. However, the research did support the weaker form of the category fallacy, in that there were differences at a symptomatic level for those who had migrated from South Asia. For example in the Bangladeshi group, loss of self-esteem or guilt were either less prominent or absent. The study had a number of strengths. It had a large sample size for a qualitative research design (116 participants), a well-established method of data analysis, the hypotheses were stated a priori and the study’s conclusions appeared closely related to its data. However, the analysis lacked reflexivity and no description of reliability was included.

Overall, there is some evidence that ‘Western’ measures may not capture the full range of experiences of culturally diverse groups, but that broadly defined concepts are potentially transferable. However, no firm conclusions can be drawn and more research is needed in this area. The studies reviewed on discrimination and depression (see Table A in Appendix B) uncritically assumed the legitimacy of the concept of depression and assumed that the western concept of depression could be applied to a diverse range of ethnic groups. These unquestioned assumptions do not appear justified given that research on the category fallacy is not conclusive.

5.2.2 Positive and negative affect

It is unclear whether any of the studies under review (see Table A in Appendix B) had a clear rationale for the choice of depression measure used. The use of DSM (APA, 1994) or

21 Translated versions of depression measures have been used (e.g. Noh & Kaspar, 2003), however, the concept of depression itself was not been questioned.
ICD (WHO, 1993) diagnostic criteria may not necessarily be superior. Such criteria have been criticised for their lack of theoretical underpinnings and the limits of the phenomenological approach (Clark, Watson & Reynolds, 1995). The tripartite model of depression and anxiety of Clark and Watson (1991) may aid in understanding the relationship between discrimination and depression.

Clark & Watson (1991) proposed, and provided evidence for, a tripartite model of depression and anxiety (e.g. Watson et al., 1995 a, b). The tripartite model proposes that there are three groups of symptoms: symptoms of general distress (high negative affect) that are largely non-specific to depression and anxiety; symptoms of anhedonia and low positive affect that are specific to depression; and symptoms of somatic arousal that are relatively unique to anxiety.

Most measures of depression have items that tap into low positive affect and items that tap into high negative affect (Watson, Clark & Carey, 1988). Whilst measures of low positive affect and high negative affect do not assess depression per se, such measures of affect do delineate a more complex breakdown of the components of depression. From the studies reviewed in Table A., it is unclear whether any relationship between discrimination and depression is due to a relationship between discrimination and high negative affect, or with low positive affect. Secondly, if the measures used in the studies were measuring high negative affect, then the results may be better explained as discrimination being associated with anxiety or general distress rather than with depression. Williams et al. (2003) review of the literature found an association between ethnic discrimination and psychological distress. This suggests that general distress and high negative affect may ‘partially’ explain the relationship between discrimination and depression reported thus far in the literature.
6. Potential Moderating and Mediating Factors

This section considers important variables that may mediate or moderate the relationship between discrimination and depression. The following focuses upon two of the more important factors: ethnic identity and the perception of discrimination.

6.1 Ethnic Identity and Acculturation

In a general review of ethnic identity Phinney (1990) shows that ethnic identity is not a unitary concept, but is made of several components: Ethnic self-identification; sense of belongingness to ethnic group; self-evaluations of group and; participation in social and cultural practices. A limitation of Phinney’s (1990) review is that it does not discuss ethnic identity of majority ethnic groups, which neglects the fact that all ethnic groups (minority and majority groups) have an ethnic identity. However, research suggests that majority ethnic members are less aware of having an ethnic identity and it is a less salient aspect of self (e.g. Alba, 1990; Phinney, 1992).

6.1.1 The effect of ethnic identity on depression

Mossakowski (2003) conducted a large study of Filipino Americans (n=2109) and found that the strength of identification to their ethnic group was directly related to fewer depressive symptoms. Further, Sellers et al. (2003) found prospective evidence for African American students whose racial group was central to their identity, reporting fewer depressive or anxiety symptoms. These studies are consistent with other studies that have found that stronger identification with one’s ethnic group was associated with better mental health (e.g. Carter, 1991; Munford, 1994; Gaudet et al., 2005).

In contrast to the above, Contrada et al. (2001) found that ethnic identity was not significantly associated with depressive symptoms. However, Contrada et al. (2001) used a

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22 The key studies within this section are those that considered ethnic identity alongside discrimination and depression within Table A (Appendix B), however, additional literature is also examined.
sample where 73% were Euro-Americans and the study did not provide separate analyses for the majority and minority ethnic groups. Therefore, a significant relationship between ethnic identity and depression for the ethnic minority groups might have been masked, due to inclusion of the larger Euro-American group (particularly as ethnic identity was found to be a less significant factor for Euro-Americans). Noh et al. (1999) also did not find a direct relationship between ethnic identity and depression for 647 South Asian refugees living in Canada. This study was limited however because the South Asian population studied had undergone a politically dangerous escape from persecution (Mossakowski, 2003).

6.1.2 The influence of ethnic identity on discrimination and depression

Phinney (2003) has argued that ethnic identity is one of the key psychological resources that members of ethnic minority groups have in enabling them to be resilient in the face of discrimination. Mossakowski (2003) found that having a strong ethnic identity buffered the relationship between lifetime ethnic discrimination and depression. Sellers et al. (2003) found similar evidence of high ethnic identity protecting against the effect of discrimination on stress for African American students.

Whilst acculturation does not directly map onto ethnic identity (Phinney, 1990), it gives some insight into the effect of ethnic identity. Whitbeck et al. (2002) found that even after accounting for standard correlates of depression, participation in traditional activities buffered the effect of discrimination on depression, as well as being a protective factor in its own right. Finch et al. (2000) studied Mexican-origin adults in America and found that the greater the maintenance of Mexican culture, the weaker the association between discrimination and depression.

The above studies found ethnic identity to buffer the relationship between discrimination and depression. In contrast, Noh et al. (1999) found having a stronger ethnic
identity actually intensified the relationship between discrimination and depression. However, possession of a stronger ethnic identity increased the effectiveness of the coping response, forbearance, on depression. Overall, this meant that strongly ethnically identified individuals had an increased vulnerability to the effects of discrimination (on depression) only if they did not use the coping response of forbearance.

6.1.3 Ethnic identity and acculturation: Summary and critique

Overall, the studies considering ethnic identity and acculturation generally suggest that possession of a strong ethnic identity and maintenance of one's culture is directly related to having fewer depressive symptoms and can decrease the effect of discrimination on depression. However, there are limitations to this research. Most of the above studies are limited due to their cross-sectional designs not allowing conclusions about cause and effect to be drawn, however there is prospective evidence for a direct effect of identity on depression. Further, the role of ethnic identity might be explained by a third factor, such as the category fallacy discussed earlier or through other factors such as social support (Plant & Sachs-Ericsson, 2004). In addition, the studies above do not appear to have considered the full complexity and multidimensional nature of ethnic identity, particularly components of identity such as having a sense of belonging and being a member of a racialized group (e.g. Nazroo & Karlsen, 2003; Phinney, 1990).

In summary, factors such as ethnic identity and culture appear to have an important and generally beneficial relationship with depression and discrimination for BME communities. However, the construct of ethnic identity is multidimensional and such complexity is often lacking in studies that considered discrimination and depression (see studies within Table A in Appendix B). Further, research on ethnic identity suggests that other concepts might have utility (e.g. belongingness).
6.2 Perceived Discrimination

Major, Quinton and McCoy's (2002) reviewed making attributions to discrimination. Major et al. (2002) suggests that attributional ambiguity is central to the process of perceiving discrimination (see Section 6.2.1 and 6.2.2 for further discussion). Major et al. (2002) highlight that being strongly identified to a stigmatised group increases perceptions of discrimination (see Section 6.2.3 for analysis of this perspective).

There are limitations to the review by Major et al (2002). They suggest there is a distinct difference between: (1) an attribution to discrimination and; (2) the reporting of discrimination. However, they do not adequately specify the difference between these two concepts and how the two concepts relate to each other is ambiguous. A further limitation was the reliance of Major et al. (2002) on experimental studies, which lack ecological validity, to support their perspective.

The extensive literature on the perception of discrimination, limits the current discussion to an overview of the area. The current review, firstly outlines two theoretical positions as to whether individuals over or underestimate discrimination and reviews the evidence for these perspectives. Subsequently the components of an attribution hypothesis are reviewed. Finally, the relation between ethnic identity and perception of discrimination is briefly considered.

6.2.1 Overestimation and underestimation of discrimination

Crocker and Major (1989)\textsuperscript{23}, drawing upon attribution theory, hypothesised that when negative outcomes occurred (e.g. being turned down for a job), the ambiguity and possibility of prejudice gave stigmatised individuals the opportunity to attribute negative outcomes to prejudice (e.g. the employer was racist), instead of making an internal attribution (e.g. not

\textsuperscript{23} Major et al (2002) review is an update of Crocker and Major (1989)
being qualified). They hypothesised that attributing an outcome to prejudice should be protective to self-esteem (and related emotions) as the attribution is external to self. This hypothesis suggests that stigmatised individuals have a tendency to overestimate the occurrence of discrimination.

A second theoretical position, the personal / group discrimination discrepancy (Taylor, Wright, Moghaddam & Lalonde, 1990), arose from robust data showing that individuals from stigmatised groups perceived higher levels of discrimination to their group than to themselves (e.g. Perloff & Fetzer, 1986; Taylor, Wright & Porter, 1993). From this, some authors have hypothesised that stigmatised individuals tend to minimise personal discrimination (e.g. Crosby, 1984; Taylor & Dube, 1986).

Crocker and Major (1989) have subsequently provided experimental evidence with a variety of stigmatised and disadvantaged groups (e.g. ethnic minority groups, females) for their hypothesis that individuals have a tendency to overestimate the likelihood of prejudice in the face of negative outcomes (e.g. Crocker, Voelkl, Testa & Major, 1991). However, Ruggiero and Taylor (1997) have criticised these studies because there was little ambiguity as to whether the person was being discriminated against in the negative consequences condition. A further criticism of Crocker and Major’s studies was the artificial nature of the experimental procedures that they have used in their research. Further, in a more ecologically valid design, Vorauer and Kumhyer (2001) found that Aborigine people minimised the prejudice of White people in a social interaction paradigm. Essed (1991), using real life accounts highlighted the coherency and structure of how stigmatised individuals decided whether they have been discriminated against. These more ecologically valid studies contradict Crocker and Major’s hypothesis and suggest that individuals do not overestimate the occurrence of discrimination. In summary, there is evidence for and against individuals
overestimating and making attributions to discrimination as hypothesised by Crocker and Major (1989).

6.2.2 Components of attribution hypothesis

Crocker and Major’s (1989) hypothesis stated that attribution to discrimination was an external attribution. However, Schmitt and Branscombe (2002, a; b) argued that as group membership is part of one’s self-identity then attributions to prejudice should have a strong internal component. Schmitt and Branscombe (2002a) have gone on to provide experimental evidence for attributions to prejudice having a substantial internal component.

Crocker and Major’s (1989) hypothesis stated that attributions to prejudice protect self-esteem and related emotions. However, Schmitt and Branscombe (2002a; b) have argued that as discrimination threatens an important part of self that is devalued within the broader society, an attribution to discrimination will not protect self-esteem and related emotions. Schmitt and Branscombe (2002a) have gone on to provide experimental evidence for how an attribution to prejudice does not necessarily protect self-esteem and related emotions.

Major et al. (2002) have updated the original Crocker and Major hypothesis and now state that attributions to prejudice do not protect self-esteem when they are made in situations lacking clear situational cues (i.e. in ambiguous situations). As the literature reviewed previously (e.g. Dovidio & Gaertner, 2004) has shown that discrimination and contemporary prejudice is often subtle and indirect in nature (i.e. ambiguous), this hypothesis would appear to have limited “real world” utility. In summary, evidence suggests that contrary to Crocker and Major’s (1989) hypothesis, an attribution to prejudice is not solely an external attribution and does not necessarily protect self-esteem (and related emotions), particularly in ambiguous situations.
6.2.3 Ethnic identity and perception of discrimination

Within the literature, there has been a debate over the direction of causality between discrimination and ethnic identity. Major et al. (2002) suggested that the more individuals identify with their group (including their ethnic identity), the more likely they are to make attributions to discrimination. In contrast, other studies have indicated the opposite causal direction, whereby discrimination leads some people to identify more strongly with their group (e.g. Branscombe, Schmitt & Harvey, 1999; Gurin & Townsend, 1986). Overall, Operario and Fiske (2001) suggest the relationship is likely to be complex and bi-directional.

6.2.4 Perceived discrimination: Concluding comments

Overall, the original hypothesis by Crocker and Major (1989) does not appear to be sustainable (Major et al., 2002). Further, many of their studies lacked ecological validity, so may not apply easily to the “real world”. However, the overview of the literature in this section shows that perceiving discrimination can be a complex process and this complexity was not often considered in the literature examining the relationship between discrimination and depression (see Table A). The research is equivocal on the matter of over and underestimation of discrimination, however, a few tentative conclusions can be drawn. Firstly, studies suggest that in most situations, attribution to discrimination has some negative impact on aspects of self-esteem and related emotions24. Secondly, attribution to discrimination is more negative in ambiguous situations. Finally, the experience of discrimination appears to increase the strength of ethnic identity, which may then increase future perception of discrimination.

7. Summary

In summary, the current review thus far suggests the following: (1) the experience of discrimination for BME communities is common in the UK; (2) there is a moderate cross-

24 Dion (2001) indicates that discrimination generally has a negative impact upon an individual and any buffering effect of attribution is a “bit of a silver lining”.

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sectional association between discrimination and depression; (3) there is a prospective link from discrimination to psychological distress, but a lack of methodologically rigorous studies does not allow comment on the direction of causality between discrimination and depression; (4) there has been a general improvement in measures of discrimination, and ‘hassles’ appear as important as ‘stronger’ forms of discrimination; (5) culture is a potentially important factor in the experience and presentation of depression in BME communities; (6) there is a lack of clarity as to whether depression instruments are measuring positive or negative affect and how each relates to discrimination; (7) ethnic identity is important and often a protective factor for depression as well as generally having a potential buffering effect between discrimination and depression and; (8) perceiving discrimination appears to be a complex process and appears to influence, and be influenced by, ethnic identity.

8. Future Directions

8.1 Clinical Implications

The American Psychological Association (2003) provides an overview of multicultural competencies, including detailed guidelines on multicultural training, education, research, practice and organisation for psychologists (see also Bhugra & Bhui, 1998; Patel et al., 2000; Sue & Sue, 2003; Sue et al., 1998).

8.1.1 Direct therapeutic work

The call for Clinical Psychologists to become more culturally competent (e.g. Halsey & Patel, 2003; La Roche & Maxie, 2003) becomes more acute with an increasingly diverse population. The evidence detailing the extent of discrimination in the UK, the relationship between discrimination and depression, and the subtlety of discrimination suggest the need to consider these factors in the training and the day-to-day work of a Clinical Psychologist working in a multicultural society. Further, the relationship between ethnic discrimination and
depression highlights the importance of considering clients' experiences of racism, both within therapy and within any formulation of a clients' presentation.

Bennett and Dennis (2000) discussed some of the issues and complexity related to addressing racism in therapy; for example they noted how the ethnicity of the therapist may effect how easily and likely it will be for a client to discuss racism. The aversive racism framework (Dovidio & Gaertner, 2004) suggests that a therapist may hold 'unconscious' racist beliefs that could manifest itself in non-verbal behaviour that is detectable by a BME client. Helms (1984) proposed that therapists who lack insight into their own prejudices are likely to perpetuate oppression. This highlights the importance of the therapist reflecting on their own ethnicity and issues of racism, and how this influences the therapeutic relationship.

The attitudes and ethnic identities of the therapist and client may interact. For example, BME clients with an existing strong ethnic identity are more likely to have experienced and perceive discrimination (e.g. Major et al., 2002; Branscombe et al., 1999). Hypothetically, these individuals might be more attuned to discriminatory cues from a therapist. This is likely to lead to disengagement from the therapeutic process. The above analysis highlights the importance of a therapist having an understanding of their own and their clients' ethnic identity development (Patel et al., 2000; Sue & Sue, 2003). The therapist having an awareness of their own cultural worldview and an appreciation of alternatives is also seen as important in avoiding an ethnocentric bias (Owusu-Bempah & Howitt, 2000; Patel et al., 2000).

The current literature review has highlighted the importance of ethnic identity, and its buffering effect between discrimination and depression. This suggests ethnic identity, participation in social / cultural activities and evaluations of ethnic group are potentially

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25 Research suggests the importance of ethnic identity in therapeutic encounters (see Sue & Sue, 2003).
26 For BME and majority ethnic group people
important areas when exploring the factors involved in a person's mental health. This may also include spirituality and religion, which is often sidelined by secular Western psychological literature (see Andersson & Asmundson, 2006; de Silva, 1993; Miovic, 2004, for examples of integrating spirituality and religion into psychology and therapy). These factors may also be important for clients from majority ethnic groups. Care should also be taken to avoid the assumptions that all BME clients are culturally homogenous with respect to religion and spirituality.

8.1.2 Wider service issues

The extent of racism and its relationship to depression strongly suggests that psychology cannot effectively address this area through individual therapy alone, but must consider intervening at the level of organisations (DOH, 2003a, b; 2004) and the social environment (Sue et al., 1998).

There is evidence of inequality, discrimination and prejudice within mental health services against BME people in the UK (e.g. DOH, 2003a, b). Due to the experience and perception of discrimination in services, people with mental health issues from BME backgrounds may not enter services or be dissatisfied with services (DOH, 2003b). In addition, BME people, particularly those with a commitment to their culture (i.e. with high ethnic identity), may not believe services will be sensitive to their cultural needs (DOH, 2003b). The 'building blocks' from Delivering Race Equality (DOH, 2003a) appear to have the potential to improve this situation through the 'delivery of appropriate and responsive services'. However, culturally appropriate services are not just those that expunge discrimination, but also those that embrace the resources and worldviews within BME cultures (e.g. Sue & Sue, 2003; Sue et al., 1998). The building block of 'Community Engagement' allows the NHS to facilitate existing community and voluntary resources to provide mental health care, which could be more culturally appropriate.
Issues such as discrimination in housing (Office of the Deputy Prime Minister, 2002) and social exclusion and mental health (Office of the Deputy Prime Minister, 2003) are considered within government departments other than the Department of Health. However, the above documents lack the consideration of the complexity of the factors involved, which limits their utility. An asset of Clinical Psychology is its ability to formulate complex issues within a biopsychosocial model (Gilbert, 2002). This suggests that Clinical Psychology could have an advisory role in improving the understanding of discrimination and mental health, so to improve the utility of the aforementioned documents on housing and social exclusion.

8.2 Future Research and Theoretical Directions

This section briefly outlines future research and possible future theoretical directions (see also Williams, 1996; Williams et al., 2003). Methodologically robust longitudinal studies are required to help understand the causal pathways between discrimination, ethnic identity, depression and related factors. The above review suggests that the relationships are likely to be complex and are unlikely to be unidirectional.

There has been a general improvement in the measurement of discrimination and Williams et al. (2003) provides a comprehensive consideration of future research in this area. A continuing research question is how the intersection of different types of discrimination may effect mood, for example discrimination based upon ethnic, gender, disability, sexuality, class etc.

The generalisability of samples needs to be improved as a large proportion of research on discrimination and depression have been completed on African Americans and/or have other restrictions on generalisability. The UK requires more research particularly as the population has been shown to be increasingly diverse. Further, research on White minority groups such as the Irish population within Britain are often neglected (Bracken, Greenslade,
Griffin & Smyth, 1998). Clark, Anderson, Clark & Williams (1999) also suggest the need to consider the perception of ethnic discrimination and its relation to health outcomes in majority ethnic groups.

Ethnic identity has been shown to be an important concept in the research on discrimination and depression. However, much of this research has originated outside the UK. Therefore, multidimensional models and measures relevant to the ethnic identity of UK based ethnic groups (minority and majority) need to be used. Phinney (1990) considered a sense of belonging to be a central part of ethnic identity. A consideration of acculturation, traditional practices and ethnic involvement discussed earlier, may also suggest the importance of a persons' attachment or belongingness to their ethnic group. Further, Baumeister and Leary (1995) have proposed that belongingness is a fundamental motivation, related to physical and emotional well-being. A sense of belongingness or attachment to ethnic group could be a new theoretical perspective to explore in future research.

Fernando (1984) proposed a theoretical link between racism and depression, using the psychosocial model of depression of Brown and Harris (1978). However, there was limited use of psychological and social psychological models of depression within the research on discrimination and depression (see Table A). A good theoretical model of depression may help to conceptualise and guide future research.

One model of depression that may have some utility is the social ranking model (Price, Sloman, Gardner, Gilbert, & Rhode, 1994), which highlights how feeling downranked or inferior can lead to depression. This seems pertinent to discrimination, as racial discrimination has been described as part of a system that keeps one group in an inferior position to another (Essed, 1991; Krieger, 2003).
As noted earlier, measures of depression have items that tap into low positive affect and items that tap into high negative affect (Watson et al., 1988). The research on discrimination and depression does not differentiate between positive and negative affect. Future research could examine whether discrimination has a relation with high negative affect and/or low positive affect.

The study of diverse groups highlights the often-untested assumption that Western models of depression are universal (Lewis-Fernandez & Kleinman, 1994). Qualitative approaches (as suggested by Chakraborty & McKenzie, 2002) would appear to be a useful research strategy to supplement quantitative approaches in a mutual feedback loop. Further, the application of psychosocial models of depression to diverse communities will be a useful test of their generalisability and/or aid in their adaptation.

9. Conclusion

There is a relation between discrimination and depression in BME communities. A consideration of the mechanisms involved in discrimination, ethnic identity and depression will become increasingly important as the UK population diversifies. Clients’ experience of discrimination needs to be addressed in direct therapeutic work and service provision. Finally, whilst more needs to be done to expand the research base and theoretical underpinnings of discrimination and depression, doing so may enrich existing ‘Western’ models, such as models of depression.
10. References


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Research Report

Experience of Ethnic Discrimination and Mood: Exploring the Utility of Social Ranking and Belongingness Models
1. Abstract

Objectives: The current study sought to test the utility of the theoretical positions of social ranking and belongingness in explaining the relationship between ethnic discrimination and low mood.

Design: A cross-sectional design using self-completion questionnaires was employed with UK undergraduate University students.

Methods: The theoretical models were tested with two groups of University students, 59 Black and Minority Ethnic (BME) students and 63 White British (WB). Participants were administered four self-completed measures: Ethnic Day-to-Day Discrimination Scale; Other as Shamer; Belongingness to Ethnic Community and; Positive and Negative Affect Scale.

Results: The results lent support to the social ranking model with External Shame mediating the relationship between Discrimination and Negative Affect for the BME and WB groups, and with Positive Affect for the BME group. The BME group was found to experience a greater frequency of Ethnic Discrimination. Comparison of the effect of Ethnic Discrimination supported the prediction that Ethnic Discrimination had a greater psychological effect for the BME group than WB group. The results did not support a mediating role of Belongingness between Discrimination and mood for either group. However, Belongingness to Ethnic Community was found to directly influence Positive Affect for the BME sample.

Conclusions: The current research highlighted the importance of considering factors that impinge upon the lives of BME people. The clinical implications of the research are discussed regarding direct therapeutic work and wider service issues. The limitations of the research are outlined as well as directions for future research, including quantitative and qualitative methods.
2. Introduction

Previous reviews of the literature have found the experience of ethnic discrimination to be related to mental health and depression (Williams, Neighbors & Jackson, 2003; Williams & Williams-Morris, 2000), and a prospective link has been found from discrimination to psychological distress (Jackson et al., 1996). The current research aimed to increase the psychological understanding of the effect of ethnic discrimination on low mood, by testing the utility of two theoretical perspectives: the social ranking model of depression and the concept of belongingness. This research is important as Clinical Psychologists in the UK are recommended to have an understanding of racism and its psychological ramifications (DCP, 1998; 2001). Further, mental health services will need to comprehend discrimination and its effect for services to be ‘appropriate and responsive’ to the needs of Black and minority ethnic (BME) people (DOH, 2003a).

The importance of having an understanding of racism and its effects on recipients is also highlighted by its prevalence. From a large national study within the UK, Virdee (1997) found that up to a quarter of White people described themselves as being prejudiced against Black and minority ethnic (BME) groups. This figure is likely to be an underestimate of racial prejudice due to social desirability. Evidence and arguments have also been put forth for the NHS and mental health services being a source of racism and discrimination (e.g. DOH, 2003a, b; McKenzie, 1999; Townsend, Davidson & Whitehead, 1990; Webbe, 1998), including psychology (Howitt & Owusu-Bempah, 1994; Riggs & Choi, 2006). Addressing this discrimination is essential as the Race Relations (Amendment) Act (2000) places a proactive duty on public services in promoting equality and tackling ethnic discrimination. The present study considers the perception of interpersonal acts of discrimination, however, people are also affected through institutional racism (Jones, 1997 discusses three levels of mutually reinforcing racism: individual, institutional and cultural).
2.1 Critique of Current Research on Discrimination and Depression

Limited research has been conducted on ethnic discrimination and depression in the UK, however, two nationally representative studies (Karlsen & Nazroo, 2002; Karlsen, Nazroo, McKenzie, Bui & Weich, 2005) and a smaller study (Cassidy, O’Connor, Howe & Warden, 2004) found ethnic discrimination to be correlated with depression or “common mental disorders” (depression and / or anxiety). One limitation of the UK research, particularly the nationally representative studies, was that perceptions of more subtle acts of discrimination or daily hassles were not measured (or not specifically measured). This is important as research suggests that contemporary racism tends to be covert and subtle\(^1\) (for reviews see Dovidio, 2001; Dovidio & Gaertner, 2004). This subtle discrimination is still detectable and affects the recipients of such prejudice (Dovidio, Kawakami & Gaertner, 2002). Further, research from other countries suggests that perception of subtle interpersonal discriminatory acts is as strongly related to depression as more blatant and acute acts (e.g. Kessler, Mickelson & Williams, 1999; Turner & Avision, 2003).

Another limitation of the UK research on discrimination and depression was that a theoretical rationale was not given for how depression was measured. Clark and Watson (1991) have proposed an influential conceptualisation of depression whereby depressive symptoms can be split into those that tap into low positive affect and those that tap into increased negative affect. Further, low positive affect is relatively specific to depression, but high negative affect is non-specific to anxiety and depression (Clark & Watson, 1991). Watson, Wiese, Vaidya & Tellegen (1999) proposed positive and negative affect to be part of an evolutionary behavioural system. Negative affect is related to avoidance of negative consequences and detection of threat, and positive affect is related to motivation to engage with the environment, so to obtain resources. Existing research on discrimination and depression does not make the distinction between positive and negative affect. It should be

\(^1\) Aversively prejudiced people might be unaware of their own prejudice.
emphasised that high negative affect and low positive affect do not measure depression per se, but consider underlying components of depression and anxiety.

The two nationally representative UK studies (Karlsen & Nazroo, 2002; Karlsen et al., 2005) considered depression as dichotomous (presence or absence) from an ICD-10 framework (WHO, 1993) (see Pilgrim & Bentall, 1999, for a discussion of professional and lay understanding of depression2). However, there appears to be an emerging consensus on the continuity of depression, where differences are quantitative rather than qualitative (e.g. Judd & Akiskal, 2000; Kessler, Zhao, Blazer & Swartz. 1997). It seems sensible therefore to consider low mood and depression as on a continuum.

All people have an ethnic affiliation (including majority groups); therefore, anyone can feel discriminated against because of their ethnic background. Williams, Yu, Jackson and Anderson (1997) note the need to research the effects of ethnic discrimination on people from a majority ethnic group. Studies comparing the perception of ethnic discrimination between a majority3 ethnic group and a minority ethnic group have found minority groups to experience higher levels of discrimination (e.g. Contrada et al., 2001; Kessler et al., 1999). However, Kessler et al. (1999) within the United States found that around a fifth of non-Hispanic White people reported perceiving ethnic discrimination4. Further, Contrada et al. (2001) found that for White students at an American University there was a relationship between ethnic discrimination and stress. No research in the UK has explored ethnic discrimination and depression with a White British (WB) sample. However, it appears likely that majority ethnic groups will experience less ethnic discrimination than minority ethnic groups.

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2 Pilgrim and Bentall (1999) argue that the medical notion of depression is inadequate. They argue that neither medical naturalism (a universal perspective) or social constructionism provide an adequate understanding of human misery and advocate the 'middle position' of critical realism.

3 The use of the term 'majority ethnic group' does not necessarily refer to a statistical majority, but refers to the culture whose practices and history are validated (or dominant) over other cultures. Within the context of the UK, the majority ethnic group would also refer to the statistical majority.

4 Nearly 90% of non-Hispanic Black people reported experiencing lifetime and/or day-to-day discrimination.
As little research has considered ethnic discrimination with majority ethnic groups, it is unclear whether the pattern of relationships between ethnic discrimination with mood and other psychological variables will be different for ethnic minority and majority members. However, as BME groups are stigmatised and disempowered (Jones, 1997), the experience of ethnic discrimination is likely to hold more meaning and have a greater impact than discrimination experienced by majority ethnic groups. Further, the current and historic level of negative stereotypes of BME groups as inferior (Fernando, 1991; Howitt & Owusu-Bempah, 1994; Pilkington, 2003) may suggest that discrimination will have a different meaning and increased effect on the mood and the psychology of BME people in comparison to WB people. Overall, ethnic discrimination appears to be experienced more often and is likely to have a greater effect on BME people than WB people.

The two nationally representative UK studies (Karlsen & Nazroo, 2002; Karlsen et al., 2005) did not test a psychological model of the relationship between the discrimination and depression. Cassidy et al. (2004) tested the role of personal and ethnic self-esteem, however, their research only partially supported this model. Further, Fernando (1984) suggested the utility of a psychological model of depression in considering the effect of discrimination, however, such a model has not to date been tested empirically.

2.2 New Theoretical Directions

This section considers whether Social Ranking and Belongingness theory can help explain the mechanism through which discrimination influences mood and depression. Social ranking and belongingness theories are reviewed as both emphasise the importance of interpersonal factors, alongside psychological and biological factors and so allow a useful bridge to be built between discrimination and mood (Baumeister & Leary, 1995; Gilbert, 1992). Therefore, these perspectives have the potential for helping Clinical Psychologists...
understand the psychological effect and mechanism of action of a sociological / interpersonal variable such as discrimination. Further, the two theories are envisioned as being compatible with and can be integrated with many other theoretical models of depression and mood, as each is proposed as describing an evolved mechanism that influences depression and mood (Baumeister & Leary, 1995; Gilbert, 1992).

Social ranking and belongingness theories are considered so to help explain the mechanism of action between discrimination and depression / mood. The elucidation of this mechanism or “how” discrimination (a predictor variables) has an effect on mood (an outcome variable) will require the consideration of potential mediating variables (Frazier, Tix & Barron, 2004). In contrast, moderating variables address “when” or “for whom” a predictor is related to an outcome and do not consider mechanisms of action, which is the focus of the current study.

2.2.1 Social rank and external shame

The evolutionary perspective of social ranking theory highlights the importance of interpersonal relationships and how people evaluate their worth within these relationships (Gilbert, 1992; Price, Sloman, Gardner, Gilbert & Rhode, 1994). Within social ranking theory, life events lead to low mood and depression if they are evaluated as embodying involuntary loss of status or rank (Gilbert, 1992). It has been proposed that originally within human evolution, social hierarchies were maintained by threat and submissive displays, however, more recent evolution has meant that social ranking is maintained by social attractiveness (Gilbert, 1989; 1992). Relating this to discrimination, it seems that the ideology of racism and its actions attempts to place stigmatised individuals in an inferior position. Further, racially motivated physical assaults and verbal abuse can be seen as threats placing stigmatised individuals within submissive positions (Essed, 1991; Fernando, 1991; Howitt & Owusu-Bempah, 1994; Pilkington, 2003). However, as noted above it appears that subtle
forms of discrimination and day-to-day hassles are as important in the experience of BME people as more overt forms of racism (Essed, 1991; Kessler et al., 1999). Within social ranking terms, these subtle incidents could be seen as devaluing a person’s social standing and social attractiveness.

Gilbert (2000a) has proposed that there are three types and sources of defeat and subordination: (1) external attack or social putdown; (2) low or loss of resources; and (3) internal sources of attack. Using this conceptualisation suggests that discrimination could lower rank in the following manner: the pervasive nature of racism and of being chronically devalued (as noted by Essed, 1991; Pilkington, 2003) could be experienced directly as an external attack or putdown (interpersonal or physical), may block access to resources (e.g. employment opportunities), which may then become internalised as a source of attack (e.g. self-criticism), therefore increasing the probability of feeling down-ranked. The Gilbert (2000a) conceptualisation also highlights that ethnic discrimination could be one amongst many internal and external factors\(^6\) that may effect a persons’ feelings of rank, such as childhood experiences, domestic violence, housing etc (Gilbert, 1992). Therefore, social ranking theory would suggest that the relationship of ethnic discrimination to depression would be mediated by a person’s overall evaluation of social rank.

Discrimination and rank are also likely to be correlated, as feeling subordinate and down-ranked has been related to increased vigilance to sources of threat (Gilbert, 1992). Therefore, from an evolutionary perspective, for individuals who feel down-ranked\(^7\), it might be adaptive to be more alert to threat (e.g. interpersonal discrimination), than individuals who do not feel down-ranked. Patel and Fatimilehin (1999) have argued for the adaptive nature of

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\(^6\) Factors may also affect each other, for example poor housing may affect feelings of rank, but poor housing may also be a result of ethnic discrimination.

\(^7\) Due to discrimination or other internal and external factors
hypervigilance of ethnic minority members in a hostile environment, particularly when
discrimination is subtle.

Shame is a painful self focussed emotion that relates to a negative evaluation of the
self (by the self or others) (Gilbert, 1998a; Lewis, 1971; Tangeney, 1990). Shame has been
associated with perceptions of being devalued, demeaned and putdown (Lewis, 1987;
Tangeney, 1993, 1995). One measure of rank is how an individual believes others rank the self,
which has been termed ‘external shame8’ (Allan, Gilbert & Goss, 1994) and has been shown
to be strongly correlated to depression (Gilbert, 2000b). Theorists have also put shame within
a social context and as part of a social threat system (Gilbert, 2003, Kemeny, Gruenewald &
found that social events that embody some form of humiliation or shame are likely to lead to
depression, more than loss events alone. From the above, it could be hypothesised that ethnic
discrimination could be experienced as shaming and as being down-ranked by others, which
could lead to low mood or depression, however, this has not be empirically studied.

Majority ethnic group members generally hold a dominant position within society,
whereas ethnic minority members are stigmatised and placed in a disenfranchised and
submissive position (Jones, 1997). Within social ranking theory an act to lower someone’s
social status and ranking (such as ethnic discrimination) is less meaningful, less threatening
and has less psychological impact for those in a dominant position (i.e. majority ethnic
members) than those in a subordinate position (i.e. minority ethnic member)(Gilbert, 1992).
Overall, it could be hypothesised that ethnic discrimination will have a greater psychological
effect (including external shame and mood) on ethnic minority people (e.g. BME people) in
comparison to ethnic majority members (e.g. WB people).

8 External shame is conceptually similar to stigma consciousness (Pinel, 1999).
In summary, social ranking theory highlights the importance of interpersonal relations and how feeling down-ranked can lead to feeling low in mood and depressed. It was discussed how discrimination could lead to a person feeling down-ranked and so lower a persons’ mood. It was also suggested that from the perspective of social ranking theory, ethnic discrimination would have a greater impact upon BME people than it would on WB people. Overall, it was proposed that social ranking variables (i.e. external shame) would mediate the relationship between ethnic discrimination and mood.

2.2.2 Belongingness, discrimination and mood

A second theoretical position is one by Baumeister and Leary (1995) who have argued that the need to belong is a fundamental human motivation. Baumeister and Leary (1995) have drawn a hypothetical parallel with other theoretical positions such as the humanistic tradition (e.g. Maslow, 1968) and in particular with attachment theory (e.g. Bowlby, 1969, 1973). Baumeister and Leary (1995) suggested that belongingness requires two integral conditions: frequent contacts or interactions with others and; this contact to be within an affectively caring relationship. Their review highlighted how a sense of belongingness relates to positive emotions and a lack of belongingness relates to negative affect such as anxiety and depression. More recently, a large study of adolescents found that a lack of belonging was linked to symptoms of depression (Ueno, 2005).

Baumeister and Leary (1995) have discussed belongingness as a general concept and have not considered belongingness to specific groups. From the separate theoretical tradition of attachment theory, attachment to specific groups has been found to relate to a variety of psychological constructs, including positive and negative affect (Smith, Murphy & Coats, 1999). Whilst the attachment literature is distinct from the belongingness literature, hypothetical parallels have been drawn between the two concepts. Therefore, it would seem sensible to expand the concept of belongingness to consider specific groups as has been done
in the attachment literature. It could be hypothesised that belongingness to an ethnic community could be an important domain, particularly for people from a BME community.

Branscombe, Schmitt and Harvey (1999) proposed and provided evidence for a rejection identification model of the experience of discrimination with stigmatised or minority groups. They suggest two opposing pathways between the perception of discrimination and psychological well-being and mood. The first pathway is that the perception of discrimination has a direct and negative influence on psychological well-being and mood. However, with the second pathway, the perception of discrimination and rejection from the majority group increases identification with the minority group; this increase in identification in turn has a positive impact on psychological well-being and mood. A review by Stein (1976) supported the view that external threats increase group cohesion. Baumeister and Leary (1995) also noted that the inclination to form and increase social bonds so to defend against external threats (such as discrimination); this increase in belongingness then has a positive influence on mood. Overall, it could be hypothesised that there will be two pathways between the experience of discrimination and mood: the first being a direct negative influence of discrimination on mood and; the second pathway being discrimination increasing belongingness, this increase in belongingness in turn increasing mood (i.e. belongingness partially mediates discrimination and mood). Therefore, the second pathway (the mediated pathway) will partially suppress the effect of the first pathway (direct influence of discrimination) on mood, and so decrease the association between discrimination and mood.

This preceding literature suggests that a sense of belongingness to ethnic community will increase mood. Further, ethnic discrimination, as it presents a threat, is likely to increase

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9 Major, Quinton and McCoy (2002) argue for the opposing causal direction whereby people who identify strongly with a stigmatised group are more likely to make attributions to discrimination. As of yet the causal direction between discrimination and identification with a person's minority group has not been fully elucidated.

belongingness. Overall, it is argued that the relationship between ethnic discrimination and mood is partially mediated by belongingness to ethnic community.

2.3 Summary and Aims of the Study

There has been limited research on ethnic discrimination and depression in the UK. The current study aims to fill some of the gaps in the research by considering the perception of day-to-day acts of discrimination (primarily subtle acts of discrimination but also blatant forms) and by considering the underlying components of depression (low positive affect and high negative affect). This study addresses the topic with majority (WB) and minority (BME) ethnic groups, it is predicted that BME people will perceive discrimination more often than WB people. Further, it is expected that ethnic discrimination will be have a greater psychological impact upon BME people than WB.

A key research consideration is the utility of two psychological models in explaining the hypothetical link between discrimination and low mood. The social ranking perspective predicts that higher ethnic discrimination will be related to greater external shame and lower mood. Further, it is hypothesised that external shame will mediate the relationship between discrimination and mood. The belongingness perspective predicts that a greater sense of belongingness to ethnic community will increase mood. This perspective suggests that ethnic discrimination will increase belongingness to ethnic community, as discrimination is seen as a threat. Belongingness is predicted to mediate the relationship between discrimination and mood.

2.4 Hypotheses

There are two sets of hypotheses: the first set (H1 to H6) applies to each group individually (WB and BME): the second set (H6 to H9) considers differences between each group (WB and BME).
2.4.1 Hypotheses applied individually to each group (WB and BME)

H1 As ethnic discrimination increases, mood will lower\textsuperscript{11}.

H2 As ethnic discrimination increases so will external shame.

H3 External shame will mediate the relationship between discrimination and mood.

H4 As belongingness increases so will mood (positive affect increase and negative affect decrease).

H5 As ethnic discrimination increases so will belongingness to ethnic community.

H6 Belongingness will mediate the relationship between discrimination and mood.

2.4.2 Hypotheses comparing groups (BME and WB)

H7: The BME group will report more ethnic discrimination than WB group.

H8: The relationship between discrimination and mood will be stronger for the BME than the WB group.

H9: The relationship between discrimination and shame will be stronger for the BME than the WB group.

3. Method

3.1 Methodological Rationale

The research hypotheses were studied using a quantitative methodology. Quantitative methods have advantages in terms of higher generalisability, conventions on reliability and validity, and allow the testing of hypotheses (Coolican, 2004). However, an advantage of qualitative approaches is the depth or thickness of the data obtained (Geertz, 1973), with the corresponding disadvantage of a loss of generalisability. Despite the advantages of qualitative methods, a quantitative approach was chosen because separately, the area of ethnic discrimination and the areas of social ranking / belongingness had been explored.

\textsuperscript{11} As discrimination increases, positive affect will decrease and /or negative affect increase.
quantitatively (with corresponding measures available), but the topics had not been considered together.

The qualitative approach allows an exploration of how people make sense of their personal and social world, and so allows meaning to be derived from the individual rather than imposed top-down (Smith & Osborn, 2003); this might be especially important in avoiding an ethnocentric bias (Howitt & Owusu-Bempah, 1994). However, interpersonal ethnic discrimination has been considered from a qualitative perspective, which has contributed to the design of quantitative measures (Essed, 1991). Within the UK, qualitative research on the concept of external shame with South Asian women has shown the concept to have resonance (Gilbert, Gilbert & Sanghera, 2004). This suggests the utility of using existing quantitative measures.

Vredenburg, Flett and Krames (1993), in a review of the use of analogue student samples argued for their utility and the continuity of depression. However, a caveat to this is that student samples that have higher scores on depression scales tend to express the continuity perspective most clearly (e.g. Cox, Enns & Larsen, 2001; Vredenburg et al. 1993). Despite this, previous research using the social ranking model, whilst finding some differences between student and clinical populations, have found the broad thrust of the results to be similar (e.g. Allan & Gilbert, 1995, 1997). Overall, the use of a student sample can be justified as an initial study.

Participants were split into two groups, a White British (WB) group and a Black and Minority (BME) group. People defining themselves as ‘White Other’, such as White Irish people were placed into the BME group. The rationale for this grouping was that the BME group was conceptualised as including people who belonged to a stigmatised and
disempowered ethnic group, rather than being based upon specific visible ethnic differences (i.e. skin colour).

3.2 Participants

Power analysis: Sellers, Caldwell, Schmeelk-Cone & Zimmerman (2003) found a correlation between discrimination and psychological distress of 0.35\(^2\) within a student population. Tables (Clark-Carter, 2004) indicate that a two-tailed correlation with significance level of 0.05 and an effect size of 0.35 would require approximately a sample of 65 participants (for each group) for the study to have a power of 0.8.

Participants were 122 undergraduate University students based within a multicultural UK city with a large BME population. Students were sampled through Psychology and Sociology Departments as well as through University societies.

The 122 participants comprised two groups:

(1) 59 Black and Minority Ethnic (BME) participants. There were more female (49; 83.1 %) students than males (10; 16.9%). 86.4% were in the 18 - 21 age category, the remaining aged between 22-30. Participants were from a variety of ethnic categories (see Table 1).

(2) 63 White British (WB) participants. There were more females (44; 69.8%) than males (19; 30.2%), however, there were a higher percentage of males than in the BME sample\(^3\). The age distribution was essentially the same as the BME sample; 85.7% were in the 18-21 age category, 12.7% in the 22-30, and 1.6% 41-50.

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\(^{12}\)Pearson's Product Moment Correlation \((r)\) is equal to the effect size (Clark-Carter, 2004).

\(^{13}\) A \(\chi^2\) analysis of difference in gender frequencies across BME and WB groups was not significant \((\chi^2 = 2.94, \text{ ns})\)
### Table 1. Ethnic Categorization of the BME group

<table>
<thead>
<tr>
<th>Ethnic Category</th>
<th>% of BME group</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Asian (majority South Asian Indian)</td>
<td>55.9%</td>
<td>33</td>
</tr>
<tr>
<td>Dual Heritage</td>
<td>13.6%</td>
<td>8</td>
</tr>
<tr>
<td>Chinese</td>
<td>8.5%</td>
<td>5</td>
</tr>
<tr>
<td>White (e.g. White Irish)</td>
<td>8.5%</td>
<td>5</td>
</tr>
<tr>
<td>Black Caribbean</td>
<td>6.8%</td>
<td>4</td>
</tr>
<tr>
<td>Other Asian (e.g. East African Asian);</td>
<td>5.1%</td>
<td>3</td>
</tr>
<tr>
<td>Black African.</td>
<td>1.7%</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>59</td>
</tr>
</tbody>
</table>

### 3.3 Measures

#### 3.3.1 Positive and Negative Affect Scale (PANAS)

Mood was measured with the PANAS (Appendix C), an extensively used 20-item measure of positive and negative affect developed by Watson, Clark and Tellegen (1988). Ten items describe positive emotional states (e.g. Interested, Proud, Excited) and ten describe negative emotional states (e.g. Distressed, Guilty, Nervous). Participants are asked to rate the extent to which they have experienced each emotion in the last few weeks on a 5-point scale. The PANAS is not a measure of depression, but measures underlying components of depression and anxiety. Extensive research has shown the PANAS to have good construct validity and internal consistency (Watson & Clark, 1997). For the current study and each group, Cronbach’s alpha (internal consistency) was 0.89 or above for the Positive Affect scale and 0.79 or above for the Negative Affect scale.

#### 3.3.2 Ethnic Day-to-Day Discrimination Scale (EDS)

The EDS (Appendix D) is a 9-item measure of the experience of interpersonal discriminatory experiences, such as receiving poorer service in restaurants and shops, being called names or insulted, or being treated with less respect than others. The current study asked about experiences of discrimination due to a persons’ ethnicity. Participants are asked to rate how often they experience these discriminatory acts on a 5-point scale (ranging from 1=Never, 2= Rarely, 3=Sometimes, 4=Often, 5=Almost Always). The scale was designed by Williams, Yu, Jackson and Anderson (1997) and influenced by themes found in a qualitative study by Essed (1991). Williams et al. (1997) envisioned the scale as measuring chronic,
routine and relatively minor experiences of unfair treatment. The scale generally measures relatively subtle aspects of discrimination, however, the latter two items measure more overt forms of discrimination. Previous research using principle component analysis has found the scale to be made up of one factor with excellent internal consistency (Kessler et al., 1999); the alpha in this study was 0.91 for the BME group and 0.87 for the WB group.

3.3.3 Other as Shamer (OAS)

The OAS (Appendix E) was developed by Goss, Gilbert & Allan (1994) and Allan et al. (1994) to measure external shame, which is how a person thinks others perceive the self. It consists of 18 items considering a person’s view of external judgements (e.g. Other people put me down a lot), participants rate how often they feel / think these on a 5-point scale (ranging from 0= never, to 4=almost always). Previous research has highlighted the scale’s validity (Allan et al. 1994; Goss et al. 1994) and it has been shown to have excellent internal consistency (Gilbert, 2000b); for the current study, the alpha was above 0.90 for each sample.

3.3.4 Belongingness to Ethnic Community (BEC)

The BEC (Appendix F) is an exploratory 8-item measure, which was designed for the current study. The items were based upon Baumeister and Leary’s (1995) review of the need to belong as a fundamental motivation. Baumeister and Leary (1995) posited two criteria for belongingness: (1) frequent contact with others and; (2) within an emotionally warm / caring relationship. With the BEC, 4 items were designed to tap contact with ethnic community (e.g. I have a lot of contact with people from my ethnic community) and 4 items were designed to tap emotional warmth / caring (e.g. I feel emotionally close to people in my ethnic community). Participants were asked to rate their agreement with each item on a 7-point scale (anchored by 1- disagree strongly and 7- agree strongly). Four items were negatively worded (e.g. I interact little with people from my ethnic community) and four positively worded (e.g. I see people from my ethnic community a lot).
3.4 Procedure

Following approval by relevant ethics committees (Appendix G), potential participants were identified through lecturers within Sociology and Psychology departments and leaders of University Societies. The author gave an initial 10-minute presentation regarding the research to potential participants in lectures or at society events. Subsequently, lecturers or leaders of the Societies distributed information sheets (Appendix H) and questionnaires to interested participants; the author was not present at this point. Potential participants could return completed questionnaires to the author via the use of stamped addressed envelopes or through the lecturer (or leader of a society). The questionnaire packs consisted of a brief demographic sheet (Appendix I) plus the four self-complete scales, presented in the same order. As the demographic sheet and questionnaires limited participants being identified, a consent form was not used to further protect anonymity. Consent for participation was assumed through return of the questionnaire pack. The author completed all data entry. Demographic details were entered into a password-protected database and the questionnaire data was input anonymously into a separate database. The two databases were coordinated through participants being assigned a case number.

3.5 Data Analysis

The author explored all variables graphically and statistically to describe the data and check for outliers, skewness and normal distribution, so to ensure the suitability of data for parametric statistics. The BEC scale underwent factor analysis to consider the structure of the scale. Principle components analysis was used, rather than “factor analysis” as principle component analysis is a psychometrically sound procedure and is theoretically less complex than factor analysis (Field, 2000). An extensive review by Guadagnoli and Velicer (1988) found that solutions using either statistical technique were generally similar. The main form of data analysis was multiple regression with an initial correlation matrix. Mediation analysis, using regression, was carried out using the procedures detailed by Baron and Kenny (1986).
Differences between groups were explored using independent group t-tests and comparison of correlation coefficients.

4 Results

4.1 Exploration of the Factor Structure of the Belongingness to Ethnic Community Scale

As the BEC was designed specifically for current study, it was unknown whether the items reduced to the two intended subscales (contact and emotional closeness). Therefore, factor analysis was conducted to look at the underlying structure of the scale. Regarding sample size for factor analysis, Kass and Tinselly (1979) recommend 5-10 participants per item. The BEC has 8 items and so requires 40 – 80 participants for each group, suggesting each group had an adequate sample size.

**BME Group.** Before considering the structure of the Belongingness scale, suitability of the data for factor analysis was assessed. The Kaiser-Meyer-Oklin value was 0.75, above the recommended value of 0.6 (Kaiser, 1974) and Barlett’s Test of Sphericity (Bartlett, 1954) reached significance. The 8 items of the Belongingness Scale were subjected to an initial exploratory principle component analysis with varimax rotation\(^{14}\) using SPSS version 12. This analysis produced a solution with one factor having an eigenvalue above 1. This single factor explained 53.8% of the variance and all factors loaded above 0.55 (see Table 2).

**WB Group.** For the WB group, the Kaiser-Meyer-Oklin value was 0.67, above the recommended value of 0.6 (Kaiser, 1974) and Barlett’s Test of Sphericity (Bartlett, 1954) reached significance, suggesting that the data was acceptable for factor analysis. Principle component analysis was conducted using Varimax Rotation. The analysis produced 2 factors with eigenvalues above 1, explaining a total variance of 64.3%. However, 3 items had loadings above 0.4 on both factors (but loaded in the opposite direction for each factor). The

\(^{14}\) Direct Oblimin Rotation essentially produced the same results as Varimax for WB and BME.
positively loaded factors on factor 1 were all the items that were positively worded (e.g. I see people from my ethnic community a lot) and the positively loaded factors on factor 2 were the negatively worded items (e.g. I do not feel emotionally close to people in my ethnic community). Therefore, it was decided to force a one-factor solution. This single factor explained 48.6% of the variance and all items loaded above 0.4 (see Table 2).

Table 2. Single factor loadings for the BEC scale

<table>
<thead>
<tr>
<th>Item</th>
<th>BME loadings</th>
<th>WB loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I interact little with people from my ethnic community</td>
<td>-.59</td>
<td>-.41</td>
</tr>
<tr>
<td>2. I do not feel emotionally close to people in my ethnic community</td>
<td>-.80</td>
<td>-.69</td>
</tr>
<tr>
<td>3. I see people from my ethnic community a lot</td>
<td>.82</td>
<td>.60</td>
</tr>
<tr>
<td>4. I feel people from my ethnic community care about me</td>
<td>.69</td>
<td>.80</td>
</tr>
<tr>
<td>5. I do not socialise with people from my ethnic community</td>
<td>-.77</td>
<td>-.74</td>
</tr>
<tr>
<td>6. I feel emotionally close to people in my ethnic community</td>
<td>.79</td>
<td>.78</td>
</tr>
<tr>
<td>7. I have a lot of contact with people from my ethnic community</td>
<td>.81</td>
<td>.76</td>
</tr>
<tr>
<td>8. I feel people in my ethnic community do not care about me</td>
<td>-.57</td>
<td>-.72</td>
</tr>
</tbody>
</table>

Eigenvalue 4.31 3.89
Variance explained (%) 53.81 48.58

Note: BME= Black and minority ethnicity; WB= White British

The BEC scale was designed with two separate subscales (contact and emotional closeness). However, both subscales were seen as integral to the concept of belongingness, and this may explain why only one factor was found in the analyses. The scale was scored by reversing the negatively worded items (1, 2, 5, 8) and then summing all items.

4.2 Data Screening and Initial Analysis

4.2.1 Data screening

All variables were normally distributed and did not have significant outliers, except for the Belongingness (BEC) scale, which was not normally distributed for both WB and BME (negatively skewed) as indicated by the Kolmogorow-Smirnov statistic. Therefore the Belongingness (BEC) scale was transformed by reflect and square root (see Tabachnick & Fidell, 1996); this resulted in the BEC scale being normally distributed for the BME group. However, for the WB group, the Kolmogorow-Smirnov statistic was still just significant (p=0.05) for the transformed distribution, indicating a non-normal distribution. The figures in
the tables below use the transformed data (unless otherwise stated), however, the data should be interpreted cautiously.

4.2.2 Initial analyses: Descriptive statistics and differences between groups

Table 3 gives the means, standard deviation and ranges of the variables for the BME and WB groups. Differences between groups were examined by the means of t-tests (the results of t-tests are displayed in Table 3). There was one uncompleted OAS questionnaire for each group; all other questionnaires were fully complete. The mean and standard deviations on the Other as Shamer (OAS) were found to be similar to previously published UK research using students (Gilbert, 2000b). The Ethnic Day-to-Day Scale (EDS), Belongingness to Ethnic Community (BEC) and the Positive and Negative Affect (PANAS)\textsuperscript{15} have not been used in previous UK research on students, so comparison of these measures with previous research was not possible.

The means and maximum scores were higher on the OAS and Negative Affect for the BME group than the WB group. However, there were no significant differences between the two groups on the OAS ($t = -1.01$, $ns$) or Negative Affect ($t = -1.57$, $ns$). The non-transformed BEC data showed a higher mean for the BME group than the WB group, with a similar range. Again, there were no significant differences between groups on the BEC questionnaires ($z = -1.72$, $ns$)\textsuperscript{16}. The mean, standard deviation and range on the Positive Affect scale were closely similar for the BME and WB group.

The BME group had a slightly higher mean and a higher maximum value on the EDS than the WB group. Further, in line with Hypothesis 7, the BME group significantly perceived more Discrimination than the WB group ($t = -3.09, p<0.01$); yet, the magnitude of the

\textsuperscript{15} The PANAS has been used with UK students, but not this specific version.
\textsuperscript{16} Mann-Whitney U Test
differences in the means was moderate (eta squared = 0.073)\textsuperscript{17}. Further, 10.2% of the BME group (6/59) reported not experiencing any Discrimination, whereas this was 27% for the WB group (17/63). A $\chi^2$ analysis of the difference between discrimination / no discrimination frequencies across BME and WB groups was significant ($\chi^2 = 5.53, p < 0.05$).

Table 3. Comparison of BME and WB groups for all variables: Number of participants, means, standard deviations, ranges and results of t-tests.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Ethnicity</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Range</th>
<th>t-statistic</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Positive Affect</td>
<td>WB</td>
<td>63</td>
<td>33.49</td>
<td>7.68</td>
<td>17-48</td>
<td>0.37</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>BME</td>
<td>59</td>
<td>32.98</td>
<td>7.50</td>
<td>14-50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Negative Affect</td>
<td>WB</td>
<td>63</td>
<td>23.97</td>
<td>7.05</td>
<td>10-40</td>
<td>-1.57</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>BME</td>
<td>59</td>
<td>26.03</td>
<td>7.46</td>
<td>10-48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Discrimination</td>
<td>WB</td>
<td>63</td>
<td>14.22</td>
<td>4.77</td>
<td>9-26</td>
<td>-3.09</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>BME</td>
<td>59</td>
<td>17.20</td>
<td>5.80</td>
<td>9-30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-transformed Total Belongingness</td>
<td>WB</td>
<td>63</td>
<td>43.77</td>
<td>9.43</td>
<td>16-56</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>BME</td>
<td>59</td>
<td>39.80</td>
<td>10.55</td>
<td>19-56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformed Total Belongingness\textsuperscript{18}</td>
<td>WB</td>
<td>63</td>
<td>3.46</td>
<td>1.34</td>
<td>1-6.40</td>
<td>-1.89</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>BME</td>
<td>59</td>
<td>3.92</td>
<td>1.36</td>
<td>1.616</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum of OAS\textsuperscript{19}</td>
<td>WB</td>
<td>62</td>
<td>22.21</td>
<td>10.95</td>
<td>0-48</td>
<td>-1.01</td>
<td>0.31</td>
</tr>
<tr>
<td></td>
<td>BME</td>
<td>58</td>
<td>24.48</td>
<td>13.46</td>
<td>0-60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: WB = White British; BME = Black and minority ethnicity

Overall, between the BME and WB group, the only significant differences were the BME group experiencing Ethnic Discrimination more often (supporting Hypothesis 7). There were no significant differences in terms of Negative Affect, Positive Affect, Belongingness or Shame.

\textsuperscript{17} All analyses of effect size are based upon Cohen (1988).
\textsuperscript{18} For 'Transformed Total Belongingness', lower scores indicate higher belongingness due to the 'reflect and square root' transformation. There was no significant difference on the Belongingness data between the BME and WB groups using the non-parametric Mann-Whitney U Test ($z=-1.72, p=0.085$).
\textsuperscript{19} One participant in each sample did not complete the OAS
4.2.3 Initial analyses: Correlations between discrimination, mood and shame

A Pearson product-moment correlation matrix was calculated as an initial exploratory step, before considering regression and mediation of variables. Table 4 shows the correlations between Positive Affect, Negative Affect, Ethnic Discrimination, Belongingness and the Other as Shamer. Correlations for the BME group are presented on the top row and WB on the lower row for each variable. Hypothesis 1 predicted that ethnic discrimination would have a negative relationship with mood (i.e. increase Negative Affect and decrease Positive Affect). The significant correlations (Table 4) between Ethnic Discrimination and Negative Affect for the WB and BME groups support Hypothesis 1. These correlations were of a medium effect size. However, for the WB and BME group there were non-significant relationships between Ethnic Discrimination and Positive Affect; for the WB group the correlation was very small ($r = 0.06$, ns) and for the BME group the correlation was small to medium sized ($r = -0.23$, ns).

| Table 4. Correlations (2-tailed Pearson's) of all variables for BME (Top row) and WB (Bottom Row) |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Ethnicity                                       | PA     | NA     | ED     | B      | OAS    |
| Positive Affect (PA)                           | BME    | .004   |        |        |        |
|                                                | WB     |        |        |        |        |
| Negative Affect (NA)                           | BME    |        | -.34** |        |        |
|                                                | WB     | -.23   | .34**  |        |        |
| Ethnic Discrimination (ED)                     | BME    | -.23   | .34**  | .05    | .56**  |
|                                                | WB     | .06    | .29*   | .11    | .08    |
| Belongingness20 (B)                            | BME    | -.31*  | -.06   | .05    | .15    |
|                                                | WB     | -.26*  | .11    | .08    |        |
| Other as Shamer (OAS)                          | BME    | -.55** | .42**  | .56**  | .28*   |
|                                                | WB     | -.2421 | .51**  | .28*   | .28*   |

Note: PA= Positive Affect; NA= Negative Affect; ED= Ethnic Discrimination; B= Belongingness
* $p < 0.05$  ** $p < 0.01$

Hypothesis 2 predicted that, as ethnic discrimination increased, so would external shame. This was supported by the correlations in Table 4, for both the WB and BME group. For the WB group the effect size was of a medium magnitude and for the BME group it was large.

20 Due to the transformation of belongingness, the direction of the correlations with belongingness will be in the opposite direction to what they would have been before the transformation. (See also Table 8).
21 $p<0.06$
Overall, initial analyses lend support to Hypothesis 7 (BME group experiencing more discrimination than WB). Analyses provided partial support for Hypothesis 1, in that Discrimination was related to higher Negative Affect for both groups. However, with Positive Affect, the relationship was not significant for the WB group and only approached significance for the BME group. Further, Hypothesis 2 was supported for both groups, with Ethnic Discrimination having a relationship to External Shame, although the effect size was larger for the BME group.

4.3 Analysis of Discrimination, Shame and Mood

4.3.1 Testing external shame as mediator between discrimination and negative affect

It was hypothesised that shame would act as a mediator between discrimination and mood (Hypothesis 3). Hypothesis 3 was tested in relation to negative affect using multiple regression with the BME and then the WB group.

A variable is said to act as a mediator when it partially or completely explains the relationship between a predictor and an outcome variable. The analytic strategy (see Appendix J) outlined by Baron and Kenny (1986) was followed to test whether Shame was mediating the relationship between Discrimination and Negative affect. The analytic strategy involved regression of the predictor (Discrimination) onto the outcome variable (Negative Affect) to see if there was a relationship to be mediated. Secondly, the predictor was regressed onto the mediator (Shame), as the predictor must be predicting the mediator. Thirdly, the mediator and predictor were regressed onto the outcome; for mediation, the mediator should significantly decrease the explanatory power of the predictor.

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22 The tolerance and VIF statistics for all multiple regression analyses were well within recommended limits (Bowerman and O'Connell, 1990; Myers, 1990) indicating that multicollinearity was not problematic.
Table 5. Multiple regression analysis of BME group: Testing the mediation effect of shame on the relationship between discrimination and negative affect

<table>
<thead>
<tr>
<th>Equation and outcome</th>
<th>Predictor(s)</th>
<th>B</th>
<th>SE</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equation 1: Effects of discrimination on negative affect</td>
<td>Discrimination</td>
<td>.44</td>
<td>.16</td>
<td>.34**</td>
</tr>
<tr>
<td>Outcome: Negative Affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation 2: Effects of discrimination on shame</td>
<td>Discrimination</td>
<td>1.30</td>
<td>.26</td>
<td>.56†</td>
</tr>
<tr>
<td>Outcome: Shame</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation 3: Effects of discrimination and shame on negative affect</td>
<td>Shame</td>
<td>.18</td>
<td>.08</td>
<td>.33*</td>
</tr>
<tr>
<td>Outcome: Negative Affect</td>
<td>Discrimination</td>
<td>.20</td>
<td>.19</td>
<td>.16ns</td>
</tr>
</tbody>
</table>

Note: ns = non-significant  *  p ≤ 0.05  ** p ≤ 0.01  †  p ≤ 0.001

For the BME group, the above mediation analysis summarised in Table 5 indicates that Discrimination significantly predicted Negative Affect (equation 1) and Discrimination significantly predicted Shame (equation 2). Equation 3 showed that with Shame entered, Discrimination no longer significantly predicted Negative Affect. This suggests that Shame had partially mediated the relationship between Discrimination and Negative Affect. However, Frazier et al. (2004) noted that the predictor no longer being significant, when the mediator is entered, is not enough to assume significant mediation. They provided a formula for testing the significance of the mediation (see Appendix J). This formula confirmed that Shame was significant (z=2.04, p<0.05) in mediating the relationship between Discrimination and Negative Affect for the BME group.

For all the above regression analyses for the BME group, leverage statistics (Mahalabois distance, Leverage and Cook’s D) were within recommended limits (Clark-Carter, 2004; Miles & Shevlin, 2001; Stevens, 2002) as were the influence statistic (DfBeta) (Field, 2000). For each equation, histograms and normal P-P plots of residuals suggested normal distribution, which was confirmed by a Kolmogorov-Smirnov statistic. For each
equation, the plot of standardized predicted value against standardized residual value suggested that the assumption of homoscedasticity had not been violated.

A mediation analysis was conducted with the WB group to test whether Shame mediated the relationship between Discrimination and Negative Affect (see Table 6). The results of this analysis on the WB group are similar to those obtained with the BME group. Discrimination no longer significantly predicted Negative Affect when Shame was entered, suggesting that Shame mediated the relationship between Discrimination and Negative Affect. Testing whether the mediation was significant revealed a non-significant result ($z=1.93, p=0.054$).

Table 6. Multiple regression analysis of WB group: Testing the mediation effect of shame on the relationship between discrimination and negative affect

<table>
<thead>
<tr>
<th>Equation and outcome</th>
<th>Predictor (s)</th>
<th>B</th>
<th>SE B</th>
<th>$\hat{B}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equation 1: Effects of discrimination on negative affect</td>
<td>Discrimination</td>
<td>.43</td>
<td>.18</td>
<td>.29*</td>
</tr>
<tr>
<td>Outcome: Negative Affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation 2: Effects of discrimination on shame</td>
<td>Discrimination</td>
<td>.65</td>
<td>.29</td>
<td>.28*</td>
</tr>
<tr>
<td>Outcome: Shame</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation 3: Effects of discrimination and shame on negative affect</td>
<td>Shame</td>
<td>.30</td>
<td>.07</td>
<td>.46†</td>
</tr>
<tr>
<td>Outcome: Negative Affect</td>
<td>Discrimination</td>
<td>.24</td>
<td>.17</td>
<td>.16ns</td>
</tr>
</tbody>
</table>

Note: ns = non-significant * $p \leq 0.05$ ** $p \leq 0.01$ † $p \leq 0.001$

Assumptions of multiple regression were met, except that for one case in equation 1 and 2, the leverage statistics were slightly above the levels recommended by Stevens (2002). However, the DfBeta statistics did not suggest that these cases were overly influential and removal of the cases did not change the outcome of the analysis.
In summary, the analyses supported the hypothesis 3\footnote{Hypothesis 3 in relation to negative affect} that External Shame mediates the relationship between Discrimination and Negative Affect for the BME group. There was a similar, if not quite significant, finding with the WB group.

4.3.2 Testing external shame as mediator between discrimination and positive affect

This section considers whether External Shame mediates the relationship between Discrimination and Positive Affect (Hypothesis 3). As noted previously (Appendix J), the first equation in a mediation analysis considers the effect of the predictor variable on the outcome variable. With the analysis of whether Shame mediates the relationship between Discrimination and Positive Affect, the first equation examined the effect of Discrimination (predictor) on Positive Affect (outcome). However, the correlation matrix (Table 4) shows that for the BME and WB group, there is not a significant relationship between Discrimination and Positive Affect. This means that the first equation (the effect of Discrimination on Positive Affect) in the mediation analysis would not be significant for either group.

Although the above shows that Discrimination did not predict Positive Affect (the first equation in the mediation analysis), Kenny, Kashy and Bolger (1998) noted that the first equation in a mediation analysis is not required. Further, Shrout and Bolger (2002) suggested that this first equation does not have to be included if the predictor variable (e.g. Discrimination) is distal to the outcome (e.g. Positive Affect). Therefore, an analysis of whether Shame mediated Discrimination and Positive Affect was conducted for the BME group. It was not possible to conduct a mediation analysis for the WB group, as the correlation matrix indicated that the relationship between Shame (mediator) and Positive Affect (outcome) was not significant.
Table 7. Multiple regression analysis of BME group: Testing the mediation effect of Shame on the relationship between discrimination and positive affect

<table>
<thead>
<tr>
<th>Equation and outcome</th>
<th>Predictor(s)</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equation 1: Effects of discrimination on negative affect</td>
<td>Discrimination</td>
<td>-.29</td>
<td>.17</td>
<td>-.23</td>
</tr>
<tr>
<td>Outcome: Positive Affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation 2: Effects of discrimination on shame</td>
<td>Discrimination</td>
<td>1.30</td>
<td>.26</td>
<td>.56</td>
</tr>
<tr>
<td>Outcome: Shame</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation 3: Effects of discrimination and shame on positive affect</td>
<td>Shame</td>
<td>-.34</td>
<td>.08</td>
<td>-.61</td>
</tr>
<tr>
<td>Outcome: Positive Affect</td>
<td>Discrimination</td>
<td>.15</td>
<td>.18</td>
<td>.11</td>
</tr>
</tbody>
</table>

Note: ns = non-significant * p ≤ 0.05  ** p ≤ 0.01 † p ≤ 0.001

Table 7 summarises the mediation analysis of External Shame on the relationship between Discrimination and Positive Affect for the BME group. For all three equations in Table 7, there was a normal distribution of residuals and homoscedasticity assumptions were not violated. Further, leverage and influence statistics were within recommended limits. Table 7 shows that Discrimination predicted Shame and Shame predicted Positive Affect. Further, Shame decreased the relationship between Discrimination and Positive Affect. The significance test of mediation, revealed that mediation by Shame of the relationship between Discrimination and Positive Affect was highly significant (z=-5.05, p<0.001) for the BME group. Overall, the mediation of Discrimination and Positive Affect by Shame (Hypothesis 3 with Positive Affect), was not supported for the WB group, but was supported for the BME group.

4.3.3 Comparison of the strength of relationships between groups

It was hypothesised that discrimination would have a greater impact upon mood and shame for the BME group compared to the WB group. Therefore, there should be a stronger relationship between Discrimination and mood, and between Discrimination and Shame, for

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24 p<0.1

89
the BME group than the WB group (Hypotheses 8 and 9). Comparison of the size of correlations between BME and WB groups was completed following the procedure by Clark-Carter (2004, pp. 309-310). One-tailed tests were used as the direction was predicted a priori. The difference in the strength of relationship between groups was not significant for Discrimination with Negative Affect ($z=0.32$, $ns$); the difference between groups was also non-significant for Discrimination with Positive Affect ($z=-1.55$, $p=0.06$). The strength of relationship between Discrimination and Shame was significantly stronger for the BME group than the WB group ($z=1.84$, $p<0.05$). This suggests that Discrimination does not have a direct differential effect on Negative Affect or Positive Affect for the WB and BME groups (not supporting hypothesis 8). However, Discrimination seems to have an increased effect on Shame for the BME group relative to the WB group (supporting hypothesis 9).

4.4 Relationship of Belongingness to Discrimination and Mood

The Belongingness data from the BEC was not normally distributed for the WB group (even after a transformation); therefore, non-parametric correlations were conducted with the data (see Table 8). The pattern of non-parametric correlations was essentially the same as the parametric correlations (see Table 4) for the BME group. However, for the WB group, the correlation between Belongingness and Positive Affect was no longer significant ($\rho=-0.20$, $ns$). Therefore, Hypothesis 4 (belongingness increasing mood) was not supported for the WB group with Positive Affect. However, the significant correlation between Belongingness and Positive Affect ($\rho=-0.33$, $p<0.05$) supported Hypothesis 4 for BME group, with the correlation of a medium size. Further, Hypothesis 4 was not supported when considering Negative Affect for either group, as the correlations between Belongingness and Negative Affect were insignificant and small.
Hypothesis 5 predicted that the experience of Ethnic Discrimination would increase belongingness. However, the parametric (Table 4) and non-parametric correlations (Table 8) showed that the association between Discrimination and Belongingness was insignificant and very small for both groups, so Hypothesis 5 was not upheld. Hypothesis 6 stated that Belongingness would mediate the relationship between Discrimination and mood. However, this could not be the case for either group as the correlations showed that the predictor (Discrimination) did not predict the mediator (Belongingness).

Overall, Hypothesis 4 (belongingness having a positive impact upon mood) was only supported for the BME group with Positive Affect, but not with Negative Affect. Hypothesis 4 was not supported at all for the WB group. Hypothesis 5 was also not supported, as Ethnic Discrimination was not positively related to Belongingness. Nor was Hypothesis 6 supported, as Belongingness did not mediate the relationship between Discrimination and mood.
5. Discussion

This section discusses the current results in relation to low mood and depression, it should be borne in mind that depression as such was not measured in the current study, but instead a more complex classification of the components of depression were measured by considering positive and negative affect.

5.1 Summary of Results

The section starts with a brief overview of the Results (see Appendix K for a tabulated summary of the results). (1) As predicted, the BME group reported more Ethnic Discrimination than the WB group. (2) For both groups, Discrimination was moderately associated with Negative Affect. (3) For the BME group, the association between Discrimination and lower Positive Affect was moderate but non-significant, for the WB group this association was very small and not significant. (4) For both groups, as Ethnic Discrimination increased so did External Shame. (5) Discrimination had a similar influence on Negative Affect for both groups. However, when considering external shame and to a lesser extent Positive Affect (when mediated by Shame), Discrimination appeared to have greater psychological ramifications for the BME group.

External Shame mediated the relationship between Ethnic Discrimination and Negative Affect for both groups. With the relationship between Ethnic Discrimination and Positive Affect, External Shame only mediated the relationship for the BME group and not the WB. Overall, the social ranking model appeared to be a better fit for the BME group than the WB. It seems that Ethnic Discrimination effects Negative Affect similarly for the BME and WB group. However, Ethnic Discrimination has a greater effect on Positive Affect (mediated by External Shame) for the BME group.
There were no differences between groups for the total Belongingness score. For the BME group, Belongingness was moderately and positively related to Positive Affect, but was not related to Negative Affect. For the WB group, Belongingness was not related to Positive or Negative Affect. Ethnic Discrimination was not related to Belongingness for either group. Further, the model of Belongingness mediating the relationship between Ethnic Discrimination and mood was not supported for either group.

Overall, the hypotheses from the social ranking model were generally supported, particularly for the BME group. In contrast, the hypotheses from the belongingness model were generally unsupported, but Belongingness did predict Positive Affect for the BME group. Ethnic Discrimination was reported more often and appeared to have a greater psychological impact (mediated by Shame) for the BME group than the WB.

5.2 Relation of Results to Theory

5.2.1 Social ranking theory

The current research suggests that shame needs to be considered as an important factor in the future development of research and theory in the area of ethnic discrimination. The social ranking model of depression appears to have utility in explaining the psychological mechanism between racist interpersonal actions and how this influences a recipient’s mood. This utility of the social ranking theory highlights the importance of applying psychological models of depression and not just considering ethnic discrimination within a sociological framework.

The current research suggests that ethnic discrimination has a greater detrimental effect on BME people than on WB people. Therefore, it appears that the meaning of ethnic discrimination is qualitatively different for BME people. This dovetails with how currently

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25 As suggested by Fernando (1984)
and historically the stereotypes of BME people have been more powerful and derogatory than stereotypes of majority ethnic people (Fernando, 1991; Howitt & Owusu-Bempah, 1994; Pilkington, 2003). The greater impact of ethnic discrimination on BME people in comparison to WB people shows that social ranking theory needs to consider the contextual and historical nature of factors affecting social rank, alongside an evolutionary basis.

Ethnic discrimination was found in the current study to relate to high negative affect for the both the BME and WB groups. The involvement of negative affect (e.g. fear, upset etc.) suggests that for both groups, ethnic discrimination influences the inhibitory system proposed by Watson et al. (1999). The inhibitory system is related to the avoidance of negative consequences and detection of threat. However, ethnic discrimination was only found to relate to low positive affect (a lack of enthusiasm, interest etc) for the BME group and not the WB group. The involvement of positive affect suggests that for the BME group, ethnic discrimination influences (or suppresses) the behavioural engagement system proposed by Watson et al. (1999). The behavioural engagement system is related to motivation to engage in the environment so to obtain resources. Overall, it appears that discrimination influences the threat system for both groups (Gilbert, 1998b, highlights the adaptive nature of hypervigilance), but has an additional impact with the BME in terms of lowering motivation and engagement with the environment. Further, it would seem that discrimination is more likely to be related to ‘clinical depression’ for the BME group as low positive affect is specific to depression (Clark & Watson, 1991).

5.2.2 Belongingness theory

The current results did not support a model of belongingness to ethnic community mediating the relationship between discrimination and mood. It was predicted that people

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26 The results also support the idea that whilst all people can feel discriminated against because of their ethnicity, ethnic discrimination has a greater impact on ethnic groups who feel stigmatised and disempowered.

27 Mediated by external shame
would form closer social bonds in the face of threat (e.g. Baumeister & Leary, 1995; Stein, 1976), however, the current study did not support discrimination increasing belongingness to ethnic community. Further, the current study did not extend the rejection-identification model (Branscombe et al., 1999) to incorporate the concept of belongingness. The current study did find that for BME people, belongingness to ethnic community had a protective association to positive affect, however this was only a medium sized relationship. Overall, belongingness did not improve the understanding of the psychological effects of discrimination, however, this may have been due to how belongingness was measured.

5.2.3 Exploratory findings and additional comments

An interesting finding in the current study was that whilst the BME group reported significantly more ethnic discrimination than the WB group, the WB group reported more ethnic discrimination than expected. There is little theory development on considering ethnic discrimination in majority ethnic groups. There could be several hypotheses for the high perception of ethnic discrimination in the WB sample: (1) the perceptions may accurately reflect experience of discrimination; (2) it may represent a stigma-threat response or hypervigilance; particularly as some of the WB students may have previously lived in less multi-cultural areas and a threat response to stigmatised individuals has been shown to be greater in people with less past contact with stigmatised individuals (Blascovich, Mendes, Hunter, Lickel & Kowai-Bell, 2001) and; (3) the results may also be partially explained by implicit racism of the WB sample as discussed within the aversive racism framework (Dovidio & Gaertner, 2004). These hypotheses are speculative and require future research.

5.2.4 Summary

Overall, the current study extended the social ranking theory to include ethnic discrimination. This framework seems to have further utility in exploring interpersonal discrimination in the future research. The concept of belongingness as measured in the current
study did not have utility in explaining the psychological effect of discrimination. The research highlights the need to further consider ethnic discrimination with majority ethnic groups.

5.3 Clinical Implications

5.3.1 Direct therapeutic work

Lewis (1971) theorised and gave examples of the importance of shame in the process of therapeutic encounters, but also noted how these shame episodes were virtually unacknowledged by therapist or client. The current finding of a relationship between discrimination and external shame, should highlight for therapists how they may unintentionally trigger shame in clients. This is particularly important when the aversive racism research base highlights the high prevalence of implicit (potentially unconscious) racism (Dovidio, 2001; Dovidio & Gaertner, 2004). The aversive racism framework shows that whilst implicit racism might be unconscious, it is enacted through non-verbal cues (and detectable by recipients) (Dovidio et al., 2002). Within therapeutic encounters, these non-verbal cues might trigger shame in BME clients (particularly those who have experienced chronic discrimination); such shame may lead to avoidance and disengagement from therapy (Gilbert, 1998a).

Gilbert (1998a) noted how therapists might become ashamed of their own thoughts feelings, thoughts or reactions. So for example, if a therapist becomes aware of racist feelings toward a client, this might become an internal source of shame for the therapist. The issues of racism and shame highlight the potential for complex and destructive interactions between a therapist and a client (see Retzinger, 1991 regarding shame / anger spirals) and the need for the therapist to be aware of transference and countertransference. This stresses the importance of the therapist being aware of their own stereotypes and reactions, and how this may impinge upon their clients and themselves.
The current study in line with other research (see William et al., 2003) shows a relationship between discrimination and low mood. This highlights the importance of considering discrimination within a formulation of a BME client's low mood and depression. The results suggest that the concept of external shame (and the social ranking theory in which it was derived) should be one key perspective in understanding a client's internal experience of being discriminated against and of being stigmatised. Social ranking theory also has utility in formulating discrimination as it allows concepts such as hypervigilance to be framed as adaptive in a hostile interpersonal environment. Further, social ranking theory can be integrated with a variety of individual therapeutic approaches, including Cognitive-Behavioural Therapy\textsuperscript{28}.

The tripartite model of depression and anxiety (Clark & Watson, 1991) showed utility in understanding the relationship between discrimination and mood. Therefore, a formulation would therefore need to consider whether discrimination was related to low positive affect or high negative affect. For example, if discrimination is related to low positive affect, therapy may focus on motivating a client to reengage with their social environment and considering how discrimination prevents them from doing this. Alternatively, if discrimination is related to high negative affect, therapy may need to focus more on themes of threat (see previous discussion on the evolutionary behavioural system of Watson et al., 1999).

Exclusively formulating discrimination and its psychological effects at an individual level has been strongly criticised (Howitt & Owusu-Bempah, 1994; LaFromboise & Jackson, 1996; Sue & Sue, 2003). As social ranking theory considers the social environment and power (Gilbert, 1992), therapeutic interventions need not only focus on internal adaptation to discrimination, but also help clients to consider ways in which they can change and alter their

\textsuperscript{28} Traditionally within Cognitive Behavioural Therapy (CBT) concepts such as 'hypervigilance', 'jumping to conclusion' etc, were seen as 'cognitive distortions', however in CBT integrated with social ranking theory such concepts are seen as adaptations to past and present threat (Gilbert, 1998b).
discriminatory and disempowering environment\textsuperscript{29}. This shares parallels with ideas from Community Psychology (Orford, 1992), which has an explicit focus upon the social environment\textsuperscript{30} and resources within a community. Within this perspective a psychologist could act as a catalyst\textsuperscript{31} to help: (1) discriminated and disempowered clients to understand the connection between their social and economic reality and their mental health difficulties; (2) bring similarly discriminated clients together to voice their understanding and; (3) engage clients in collective action to tackle discrimination and their disempowered position by mobilising existing community resources and gaining access to other resources (such as advocacy, legal representation etc).

5.3.2 Wider service issues

The current research (see also Williams et al. 2003) and the research on aversive racism (e.g. Dovidio, 2001) highlights the need to raise awareness and understanding of racism and its effects within the Clinical Psychology profession and NHS services. This need is acute given the evidence of racism within NHS services (e.g. DOH, 2003 a, b) and psychology (e.g. Howitt & Owusu-Bempah, 1994). The social ranking model appears to have utility in helping Clinical Psychologists understand the effects of racism on mood (see DCP, 2001), but it should be seen as just one perspective that has utility (see Howitt & Owusu-Bempah, 1994). A key format for raising understanding and awareness of racism and diversity would be through Clinical training courses. An optimal training model to enact this would require ethnicity and diversity to be integrated into all aspect of the training curriculum (Sue et al. 1998). However, as this is an ambitious benchmark, training courses would need to set intermediate criteria, mechanisms to reach these criteria and effective monitoring of change (Sue et al. 1998).

\textsuperscript{29}Gilbert (1992), from a social ranking perspective of depression has highlighted that “Social solutions are essential” (p.479).
\textsuperscript{30}Owusu-Bempah (2002) also describes a social perspective of discrimination and its psychological effects.
\textsuperscript{31}Community psychology emphasises user- and community led service initiatives.
5.4 Critique of the Study

5.4.1 Sample and generalisation

A difficulty with psychological research has been the tendency to use only white participants (e.g. Graham, 1992). A strong aspect of the current study was that it used a BME sample. Further, the study measured an important variable (ethnic discrimination) in the lives of BME people rather than just using ethnicity as a proxy variable (LaVeist, 1996). Another strength of the current research was that it considered ethnic discrimination with a majority ethnic group (White British), which has not been done before in the UK.

Despite these strengths, putting all BME people into one group is a crude categorisation, missing any differences between ethnic minority groups and neglects the fluid nature of ethnicity (Smaje, 1995). Therefore, it is unclear how the results from this crude categorisation apply to more refined ethnic categories. Despite this, the WB and BME split had utility in terms of considering how discrimination has a greater impact upon BME groups in comparison to the majority WB ethnic group.

Using a student sample and the manner in which they were sampled poses threats to external validity (see Banyard & Hunt, 2000; Sears, 1986, for further discussion). It is unclear how a student sample can be generalised to a clinical population. However, a perspective was taken of continuity from low mood to depression (e.g. Judd & Akiskal, 2000; Kessler et al., 1997) and research on student analogue samples (Vredenburg et al., 1993) suggests that the present findings may have some relevance to those with clinical depression.

The second threat to external validity was that the sampling procedure was based upon convenience and the procedure meant there were no statistics on response rates. At worst, this would introduce a bias that would mean the sample was not even representative of UK

32 The assumption of the homogeneity of the White British sample is also simplistic
undergraduate students. However, comparison of the current data on the OAS measure with Gilbert's (2000b) student data, show that the mean and standard deviation are similar. The sampling difficulties also mean that the comparisons between the BME group and the WB group have to be interpreted cautiously, especially as there were differences between the groups in gender composition.

In summary, the sample used in the current research had several strengths. The research did not just use ethnicity as a proxy variable and addressed a gap in the research base by considering the experience of ethnic discrimination with a majority ethnic group. The use of a minority and a majority group allowed the differential effect of discrimination to be considered. The limitations of the study were the crude categorisation of ethnicity, the use of convenience sampling and the use of a student sample. Overall, the research has some utility in understanding clinical depression. However, any generalisation should be made tentatively.

5.4.2 Measurement

One of the strengths of the study was that all the measures had good internal consistency. Further, the measures of discrimination, mood and shame had all been used in previous studies and had data on their validity. An advantage of the discrimination scale used was that it primarily measured experiences of relatively subtle aspects of interpersonal discrimination (however, two items from the scale considered more overt forms of discrimination). Subtle aspects of discrimination have been found to be associated with depression (Turner & Avison, 2003). However, focussing upon subtle aspects of discrimination is unique in the UK literature on discrimination and depression.

A key weakness of the study was that depression per se was not measured, which limits the explanatory power of the current results in understanding the relationship between ethnic discrimination and depression. However, the study had a sound theoretical basis for the
choice of mood measurement (Clark & Watson, 1991). Further, low positive affect and high negative affect have been shown to underlie depression. Considering depression and mood in this manner is unique in the ethnic discrimination literature and was shown to be important in considering the differential effect of discrimination on mood for the BME and WB group.

The topic of ethnic discrimination may have effected how “Others” was conceptualised by participants when completing the OAS measure. It is also unclear whether this would have differentially affected the WB and BME group. Despite these concerns, the mean and standard deviation of the OAS was similar to previously published research (e.g. Gilbert, 2000b).

The Belongingness (BEC) measure appeared to have face validity in measuring the constructs of contact and emotional closeness that it was theoretically designed to measure. However, face and content validity could have been strengthened by receiving more feedback from students. Further, the BEC scale does not have data on its construct or criterion validity. A further limitation of the BEC measure was the ceiling effect found particularly with the WB group. Overall, the BEC measure had limited utility in considering belongingness and future research should consider alternative measures.

5.4.3 Design and analysis

The current study had adequate power to consider moderate strength correlations, however, a larger sample size would have provided greater power to detect findings that were close to significant. A larger sample size would also have allowed the study to consider smaller strength relations; however, the clinical relevance of these relations would be questionable. Despite this, MacKinnon, Lockwood, Hoffman, West and Sheets (2002) highlighted how the majority of studies using mediation analysis have inadequate power. Despite this, the current study did find external shame to be a significant mediator. Further,
the very small correlations between discrimination and belongingness, suggest belongingness (at least as measured here) is not a clinically relevant mediator of discrimination and mood.

The current study conceptualised ethnic discrimination as effecting shame that in turn effects mood, however, the cross-sectional design of the study does not allow this causal chain to be confirmed. However, Jackson et al. (1996) found a longitudinal link from racial discrimination to psychological distress (similar to high negative affect), partially supporting the direction of causality proposed here. Further, given the subtlety, prevalence, and chronic nature of interpersonal ethnic discrimination and the number of factors that may affect a person’s sense of rank, the suggestion of a simple causal relationship is likely to be overly simplistic. It should also be noted that in social ranking theory, the relationships between the perception of discrimination and shame are conceptualised as bi-directional, with people feeling down-ranked being more aware or vigilant of discrimination.

It was hypothesised that belongingness would mediate the relationship between discrimination and mood, which was not supported in the current study. However, belongingness could also have been envisioned as a moderating variable between discrimination and mood. The current study was inadequate to consider moderation, due to the relatively small sample size and the limitation of the belongingness measure.

The current study envisioned the experience of being stigmatised and disempowered as the key elements that differentiated the BME group from the WB group. This conceptualisation fits into the academic tradition of conceiving ethnicity and identity as being formed from racism, cultural oppression and anti-racist struggles (Modood, 1997). Whilst these factors are important, one limitation of this tradition has been the neglect of how ethnicity and identity for both minority and majority groups is not static, but dynamic and

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33 Such a study could consider whether the relationship between discrimination and depression was stronger for people who had a low sense of belongingness or for those with a strong sense of belonging.
changing (Smaje, 1995). This limitation is reflected in the current study by its use of static ethnic categories, which did not allow participants to define their own ethnicity. However, Mason (1990) notes that researchers should use ethnic categories even if they are not shared by participants, if these categories help illuminate patterns of disadvantage and domination. Nevertheless, Mason (1990) suggests that researchers should be aware that these categories do not coincide with the ‘reality’ of participants’ ethnic identities.

5.5 Future Research

Future research could help to overcome some of the limitations noted above (see also LaVeist, 1996). However, this section focuses on research that follows on from the current research.

Future studies could consider alternative conceptualisations of shame, particularly as Gilbert (2000b) noted that internal and external shame can be decoupled. There appears to be a clear rationale for proposing that interpersonal ethnic discrimination would affect how a person believes others judges them (e.g. external shame). However, it is unclear whether ethnic discrimination would necessarily become internalised so to effect how a person judges themselves (e.g. internal shame). Therefore, future research could explore whether discrimination was more strongly related to external shame than to internal shame. Additionally, as the current study did not measure depression specifically it would seem important for future research to replicate the current results (which considered mood), by using a measure of ‘depression’.

An intriguing finding from the current research study was the relatively high reports of ethnic discrimination within the WB group. This would seem to warrant further research. The sound theoretical frameworks of stigma-threat and aversive racism would generate testable hypotheses, which have already been outlined (see Section 5.2.3).
A qualitative approach could be used to help 'thicken' the understanding of the relationship of discrimination with shame and depression. Further, the reflexive element within qualitative research may help to avoid ethnocentrism. This is particularly important, as there have been criticism that concepts such as depression are portrayed as universal but are in fact, Western culturally defined phenomena (see also Pilgrim & Bentall, 1999, for a critical realist perspective).

Observational methods might be particularly useful in considering the role of shame and racism within interpersonal interactions and therapeutic encounters. Analysis could be based upon transcripts or video of therapeutic encounters\(^4\) (see Barker, Pistrang & Elliot, 2002, pp. 119–136, for a discussion of observation research methods, including their use in examining the therapeutic process). Further, the social interaction studies conducted within the aversive racism framework (e.g. Dovidio et al., 2002) could be extended to consider shame. A research question could consider whether aversive racism within a therapist was related to a client experiencing shame within a therapeutic encounter.

The current research considered belongingness to ethnic community as a potential protective factor for people who faced discrimination. Future research needs to continue to not only examine how racism affects people’s lives, but also how people and communities resist it and its effects. This is important in avoiding people being seen simply as victims of racism and oppression; which has the potential for paternalistic racism (Howitt & Owusu-Bempah, 1994). Additionally, research on how people currently tackle and deal with racism may help to guide and develop future interventions.

\(^4\) The studies could be based on real or analogue encounters
5.6 Conclusion

This current study has shown the usefulness of psychological theories pertaining to depression and mood in explaining the psychological effect of day-to-day acts of interpersonal discrimination (subtle and overt forms). The study highlighted the importance of considering ethnic discrimination in relation to majority ethnic groups, even if ethnic discrimination has a greater psychological impact for minority ethnic groups.

The current study had several methodological limitations, which will need to be overcome in the future research. Clinical Psychology and NHS services will need to continue to expand their understanding of racism and turn this knowledge into action if they are to “deliver appropriate and responsive services”.
6. References


Critical Reflection
1. Introduction

In the following chapter, I consider and reflect upon particular aspects of the research process that were of emotional or psychological interest, were important learning points, or were key difficulties and decisions in the research. I firstly consider why the topic of discrimination was selected. Subsequently I discuss issues regarding the design of the research project; I focus on the use of a quantitative methodology and the inclusion of a White British (WB) sample. Following this, I will reflect upon two key areas of difficulty in the conducting the research, which were the difficulties in obtaining an adequate sample size and the development of a second research project. Then reflections are made on how I positioned Black and minority ethnicity (BME) people and myself within the research. Finally, I consider my use of the supervision process.

2. Selection of the Research Topic

In this section, I discuss some of the factors that influenced my choice to select discrimination as a research topic and reflect upon the emotions raised during the selection of this topic.

I had limited knowledge of the research and theory on racism and discrimination, until electing to write an essay on the Delivering Race Equality: A Framework for Action (DRE) (DOH, 2003) document within the first few months of starting Clinical training. Selection of this essay title was directly influential in my selection of discrimination and depression as a research topic. A variety of factors would seem to have effected my decision to select this topic and essay title. From an intellectual perspective, I had an undergraduate interest in social factors and an awareness of research that had found a longitudinal relationship between discrimination and psychosis. From a work perspective, prior to Clinical training I had worked in an area with a large South Asian population, which had raised my awareness of some of the factors affecting BME people. From a personal perspective, my wife is of African
Caribbean descent and my children would be described as ‘dual heritage’. These intellectual, occupational experiences and personal circumstances seemed to have influenced my decision to write an essay on the DRE document and subsequently conduct research in the area of discrimination.

When I first saw the option to write an essay on the DRE document, I had an instant emotional reaction, which was a mixture of excitement and anxiety. The feeling of excitement appears easier to understand as being able to write an essay on a topic that was of interest at an intellectual level and relevant within the domain of my work and personal life. The anxiety seems harder to understand, however, on reflection there appeared to be two components. Firstly, there appeared to be an aspect of avoidance in not wishing to learn or have to think about a subject (i.e. racism, discrimination) that was directly relevant to my family circumstances. Secondly and potentially more importantly, I had generally considered myself to be ‘liberal’ and felt myself as not holding racist stereotypes. However, before training I had become aware that I was not immune from holding such stereotypes. Becoming aware of this and reflecting upon this aspect of my self had been an emotionally painful experience1. It could be hypothesised that some of the anxiety in choosing the essay title was related to a fear of becoming more aware of stereotypes and prejudice within my self, and my wish to avoid the pain of this process.

The above painful experience of becoming aware of personal stereotypes could be explained within an aversive racism framework (e.g. Dovidio & Gaertner, 2004). This framework highlights that there is a cultural norm against being thought of, or seeing the self as prejudiced. However, people can still be implicitly prejudiced and covertly discriminate in a potentially unconscious manner. Due to the norm against being prejudiced, people are motivated to avoid becoming aware of such covert racism within themselves (see Plant &

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1 See Helms (1984) for how transitions in the development of white racial identity and consciousness can be emotionally painful.
Devine, 1998). This framework helped me to understand my own reactions, but was also central to understanding discrimination when writing the literature review and conducting the research.

Overall, my decision to select discrimination as a research topic was influenced by intellectual knowledge, work experiences and personal circumstances, and subsequent emotional reactions. Therefore, my knowledge of psychological theories and research on racism was developed subsequent to these initial influences. To avoid my own idiosyncratic circumstances biasing the research and my consideration of the psychological literature, it was important for me to be reflective during the whole process of conducting the research. I also feel a process of personal reflection will be important in any future research I conduct, be it using a quantitative or qualitative methodology.

3. Key Points in the Design of the Research

In this section, I discuss two key decision points in the design of the research project. I discuss my decision to use a quantitative methodology and then my decision to use a WB sample.

3.1 Selection of a Quantitative Research Method

I have had more experience using quantitative than qualitative methods, however, I had used Interpretative Phenomenological Analysis in looking at the use of interpreters and had found the methodology useful. Therefore, I was aware of some of the merits and difficulties of both quantitative and qualitative methods. A pragmatic reason for choosing a quantitative methodology was my perception that quantitative research commanded more respect and attention (in general) than qualitative research. This was particularly pertinent as

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2 Reflexivity is a cornerstone of qualitative approaches.

3 This section is not intended to focus upon technical merits and limitations of qualitative and quantitative methodology.
the topic of discrimination was emotionally important to me and I felt the area needed to be
given due consideration. This was compounded by my perception that Clinical Psychology
had not sufficiently used insights from existing research, so to address racism and improve
individual and organisational practice. Overall, I hoped that the use of a quantitative
methodology would increase the probability of my research having a positive impact upon the
practice of Clinical Psychology.

I was less certain I had chosen the correct methodology as the research progressed.
There were two key reasons for this. The first was a concern that the research was potentially
ethnocentric in applying concepts such as depression and shame cross-culturally. It seems
that a qualitative study would have avoided uncritically applying concepts such as depression
and shame ‘top-down’. A second concern was that although I had found a strong association
between shame and ethnic discrimination, I felt a qualitative project would have helped
‘thicken’ the understanding of this association. Overall, I believe the quantitative approach I
used had utility in exploring discrimination and depression. However, I believe follow-up
research using qualitative methodology would be beneficial.

3.2 The use of a White British Sample

My original intention from the outset of the research was to use only a BME group
and not a WB sample. I intended to use only a BME group because the research question of
how well social ranking and belongingness models explained the relationship between
discrimination and mood could be answered with just a BME group. Secondly, I felt
uncomfortable including a WB sample due to a growing awareness that psychology had a
history of often perceiving BME groups as inferior to a “White standard” (Howitt & Owusu-
Bempah, 1994).

4 However, see Gilbert, Gilbert and Sanghera (2004) for a qualitative study on shame with South Asian women
5 The social ranking and belongingness models were in essence being compared to each other and to a model of
an unmediated relationship between discrimination and depression.
I eventually included a WB sample within the research for two reasons. The first reason was due to articles suggesting the need for research on ethnic discrimination in majority ethnic groups. The second reason was the return of pilot questionnaires from WB people indicating that they perceived ethnic discrimination. I found this latter point particularly surprising.

To prevent the WB group being seen as the “standard” group to compare the BME group against, I tried to ensure there was a theoretical justification before conducting any comparisons between the WB and BME groups. This meant that the primary comparisons between the two groups were based upon the key variable of ethnic discrimination and the differential effect of discrimination on mood and shame for each group. However, the standard format of quantitative research reports meant that standard initial analyses included the comparison of groups on all variables. Overall, the above process highlighted for me, the need for researchers to carefully consider why and how comparisons are made between ethnic groups.

4. Key Difficulties and Decisions in Completing the Research

In this section, I consider two key difficulties and related decisions in conducting the research. I consider the problems I faced in obtaining an adequate sample size and the decisions made to overcome this. I then focus upon a second project that was designed, arranged and passed through ethics, but I was unable to complete.

4.1 Obtaining an Adequate Sample Size

When starting data collection around the end of October 2005, some of the original avenues to access students were not available. To overcome this problem I contacted alternative lecturers and University departments, so to access students. I also made a minor
amendment to the research protocol and ethics submission, so that I could access students through University Society leaders.

A second difficulty was that I was receiving very few completed questionnaires from those that had been initially distributed. I hypothesised that this could have been due to several reasons, such as a lack of incentive to complete the questionnaires, a lack of face-to-face contact with participants and the use of too many questionnaires. Around the end of November 2005, I decided that I could increase response rate by increasing face-to-face contact with respondents and by decreasing the number of questionnaires in the project. Subsequent to these modifications to the research protocol, I received a significantly higher number of questionnaires and obtained an adequate sample size.

I believe that I showed good problem solving skills in addressing the difficulties of access to students and return of questionnaires. This consisted of defining the problems, generating likely causes of the problems, and devising and implementing solutions. However, the decision to decrease the number of questionnaires was taken rapidly, partly because I was starting to worry that I was losing control of the project. A further flaw in the decision making process was that I gave my academic supervisor little time or opportunity to discuss my chosen course of action (see section on Supervision).

A further difficulty with my action to increase response rates was that I had removed three self-report measures. This included: two additional social ranking measures, the 11-item social comparison scale (Allan & Gilbert, 1995) and the 16-item submissive behaviour scale (Allan & Gilbert, 1997). As well as removing the 36-item Attachment to Ethnic Community scale (adapted from Romantic Attachment scale; Brennan, Clark & Shaver, 1998).

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6 Face-to-face contact was increased by giving a 10-minute presentation on the research. However, information sheets and questionnaires were still distributed through lecturers.
7 The project was designed with 3 additional questionnaires to those detailed in the research report.
Removal of the above measures meant that I could not consider whether alternative conceptualisations of social rank differed in their relationship to ethnic discrimination. I kept the ‘Other as Shamer’ scale (external shame) as a measure of social rank due to its superior psychometric properties. I also kept the ‘Other as Shamer’ scale, as there appeared to be a clear rationale for how ethnic discrimination affected how a person felt others judged them (external shame). But there did not appear to be such a straightforward rationale for how ethnic discrimination affected how a person judged themselves (social comparison) or for how ethnic discrimination affected how a person acted towards others (submissive behaviour). The removal of the Attachment measure meant that I only had the Belongingness to Ethnic Community scale so to consider attachment issues and the scale had not been validated. However, the attachment scale was removed due to its relative length in comparison to the belongingness scale.

Overall, despite these limitations, the decisions taken to improve access to students and their response rate were effective. However, notwithstanding the positive outcome of the decision, the process of decision-making would have been improved if I had allowed a greater dialogue with my supervisors.

4.2 The use of a Student Sample and the Second Project

The use of students in the research had limitations, such as a lack of generalisability. However, social ranking and belongingness models had been extensively considered in terms of mood and depression, but they had not been applied to the area of ethnic discrimination. Therefore, sampling students was seen to have utility in exploring a new area and allowing access to an adequate sample size. However, I had arranged an additional project to overcome some of the limitations in using a student sample.

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8 Goss, Gilbert & Allan (1994)
The second project considered South Asian women within a support group. The women had experienced domestic violence and associated emotional distress. This second project was intended to test social ranking and belongingness models with a more clinically relevant and broader sample (in terms of culture, socio-economic status, age, living circumstances etc) than the student sample. The research was also designed to consider the effect of gender discrimination and ethnic discrimination. The sample size was planned to be smaller than the student sample, but large enough to consider the relationships between the main variables.

This second project was initially conceptualised at the start of 2005. The organisation, ACTION9, provided services to the South Asian Women’s support group. The manager of ACTION gave final agreement to the project around April 2005. An ethics form was submitted in August 2005 and the project achieved final ethical approval following minor amendments in October 2005 (APPENDIX L). Data collection was then due to start in November 2005.

ACTION was related to, but independent of, a larger organization (HELP) to which the women within the South Asian women’s support group belonged. Around September 2005, the manager of ACTION contacted me to let me know that she had severed links between ACTION and HELP, and HELP now provided care to the women in the support group. At this stage, despite feeling somewhat disappointed, I felt positive that I had time to rearrange the research with the management of HELP. I think having the student research project, with which I was about to start data collection, helped me not feel overly concerned about the difficulties with the second project.

9 Names of people and organizations have been changed to protect anonymity
Around the start of November 2005, I arranged a meeting with the new site manager of the South Asian Women support group, Kareem. Kareem was very enthusiastic and supportive of the project. This was important psychologically for me because around the time of this meeting, I was experiencing difficulty in obtaining an adequate sample size for the student research. This initial optimism decreased, as Kareem did not have the autonomy to agree to the research taking place. Further, the decision regarding whether the project could go ahead was past between managers within HELP and I had difficulty with people not returning my calls. I found the end of November / start of December 2005 the most stressful time of the research. This was because I was also having problems accessing and getting returns from students and therefore I felt I was losing control of both projects. However, my general coping style was active and persistent, and I tried various options so to overcome the difficulties I was experiencing with each project.

Around mid-December 2005, I was asked to write to the Chief Executive of HELP outlining the research project. By mid January, I had not received a reply to my letter, so I followed-up by telephoning HELP. I was told that the Chief Executive had delegated the decision as to whether the project could go ahead; however, HELP were unsure to whom the decision had been delegated. At the start of February 2006, I received a letter saying that the project could not go ahead at this time, due to staff resources. My main feelings at this stage were resignation and relief. I did not have stronger negative feelings because I had collected an adequate sized student sample and I felt I had pursued the South Asian Women’s project as far as I could. I felt relieved as the difficulties in both projects had drained my energy and I was happy not to have to pursue the second project any further.

The key learning points from this process was that difficulties undoubtedly occur during the process of research and the importance of active problem solving, which was effective in solving the difficulties with the student project. However, the second project
highlighted that even repeated attempts at problem solving may not be enough to 'rescue' a project. My experience with second project highlighted the need to be able to accept I could not bring the project to fruition and to do this without negatively ruminating on the experience. In retrospect, I feel that I would have benefited, if I had more effectively sought support from others when solving the problems I faced with the research. Finally, I think considering the difficulties of the second project within a systemic perspective meant that I did not blame or feel irritated towards a particular person (including myself) for the second project not progressing.

5. Reflections on my Relation to BME Groups during the Research

Karpman (1968) proposed a conceptualisation of how people position themselves in relation to others, in terms rescuer, persecutor and victim. This conceptualisation will be applied to how I positioned myself in relation to BME people during the research and the importance of reflecting upon this.

At the start of the research, there was a danger that I placed my self in the role of a rescuer in relation to BME groups. In doing this, I placed BME people in the role of victims and, WB people and psychology in the role of persecutors (racists). I was aware from clinical work that I had a tendency to fall into the role of rescuer and became aware of the need to reflect on this during the course of the research and write-up. This reflection helped me to be more objective in how I approached the research on discrimination and depression, and in the manner in which I wrote the literature review and research report.

Initially adopting a rescuer role may have been an advantage in maintaining my motivation to conduct the research. The role of rescuer was also beneficial as it meant that I

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10 This rescuer position in relation to BME groups could also be considered within the "achieved reactive" stage of White Racial Consciousness model of Rowe, Bennett and Atkinson (1994), particularly as the achieved reactive stage is marked by an over-identification or paternalistic attitude towards BME people.
took some responsibility in addressing racism, that as a psychologist and a white person, I was implicated in. However, the rescuer role also carried the danger of positioning BME people simply as victims and not seeing the resilience and strengths of BME people. To overcome this, I felt it was important to consider resilience factors such as ethnic identity and belongingness in the design and write-up of the research. This was particularly important, as social ranking theory seemed to have the potential for restricting BME people within a victim role.

On reflection during the course of the research I believe that acting as a rescuer and wishing to save, was defensive in that it meant that I did not have to consider the persecutor (racist) within myself or my research. Finally, placing BME people within the victim role meant that I neglected how someone from a BME background may also be the perpetrator of racism. Intellectually, I came to understand this through the concept of institutional racism; whereby an individual from any background might unintentionally act in a discriminatory manner by following practices and policies that are racist (Howitt & Owusu-Bempah, 1990). When the research was initially being designed, I lacked a proper understanding of the concept of institutional racism and this contributed to the research focussing upon interpersonal (albeit subtle) acts of discrimination.

Overall, the process of reflecting upon how I positioned myself in relationship to BME people was essential in helping me avoid a narrow and rigid conceptualisation of BME people. This process of reflection positively altered how I designed, conducted and wrote-up the research, and had a beneficial effect on my clinical work with BME people.

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11 This also corresponds with the “achieved reactive” stage within white racial consciousness model (Rowe et al., 1994); particularly as it is marked by a good awareness of the existence of racism, but an unawareness of a personal responsibility in perpetrating racism.
6. The Use of Supervision

I would describe myself as self-reliant and independent, and I believe my academic and clinical supervisors would share this description of me. I believe being self-reliant has had advantages in terms of taking responsibility for completing the research, and having good self-efficacy and problem solving. However, being overly self-reliant initially had a negative impact upon my use of the supervision process, which will be briefly discussed below.

A disadvantage with being overly self-reliant was that I did not utilise my field supervisor as much as I should have; particularly as the meetings I did have with my field supervisor were beneficial. Once I became aware of my under use of my field supervisor, the pattern of supervision appeared set and difficult to alter. To overcome my tendency to be overly independent, I tried to ensure that I kept my academic supervisor well informed of research progress via e-mail and research meetings at key stages. Being overly self-reliant may also relate to my tendency to take the role of rescuer. The role of rescuer may mean that I am aware of when others need help, but I do not acknowledge when I need help and how others could be of assistance. Overall, a key learning point from the research is the need to ensure that I seek the support of others more effectively, when conducting future research.

7. Conclusion

Reflecting upon my emotional reactions and how I related to the research (particularly regarding ethnicity and discrimination) and then attempting to understand these reactions within a psychological framework was a beneficial experience. I believe the process had a positive impact upon the research, expanded my ability to work with BME people and understand issues such as racism. However, I feel that I would not have gained from the research process if I had treated it solely as an intellectual or academic exercise; being emotional engaged and reflective were key elements.

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12 On reflection this probably was not the case
Additional to the above, key learning points from the research were the importance of problem solving and persistence, as well as attempting to understand problems rather than just reacting. The research highlighted areas of development, in terms of improving my use of support, advice and supervision from others, when attempting to overcome and manage difficulties.
8. References


Appendices
APPENDIX A

Notes for Contributors

The British Journal of Clinical Psychology publishes original contributions to scientific knowledge in clinical psychology. This includes descriptive comparisons, as well as studies of the assessment, aetiology and treatment of people with a wide range of psychological problems in all age groups and settings. The level of analysis of studies ranges from biological influences on individual behaviour through to studies of psychological interventions and treatments on individuals, dyads, families and groups, to investigations of the relationships between explicitly social and psychological levels of analysis.

The following types of paper are invited:

- Papers reporting original empirical investigations;
- Theoretical papers, provided that these are sufficiently related to the empirical data;
- Review articles which need not be exhaustive but which should give an interpretation of the state of the research in a given field and, where appropriate, identify its clinical implications;
- Brief reports and comments.

1. Circulation

The circulation of the Journal is worldwide. Papers are invited and encouraged from authors throughout the world.

2. Length

Papers should normally be no more than 5,000 words, although the Editor retains discretion to publish papers beyond this length in cases where the clear and concise expression of the scientific content requires greater length.

3. Reviewing

The journal operates a policy of anonymous peer review. Papers will normally be scrutinised and commented on by at least two independent expert referees (in addition to the Editor) although the Editor may process a paper at his or her discretion. The referees will not be aware of the identity of the author. All information about authorship including personal acknowledgements and institutional affiliations should be confined to the title page (and the text should be free of such clues as identifiable self-citations e.g. "In our earlier work...").

4. Online submission process

1) All manuscripts must be submitted online at http://bjcp.edmgr.com.

   First-time users: click the REGISTER button from the menu and enter in your details as instructed. On successful registration, an email will be sent informing you of your user name and password. Please keep this email for future reference and proceed to LOGIN. (You do not need to re-register if your status changes e.g. author, reviewer or editor).

   Registered users: click the LOGIN button from the menu and enter your user name and password for immediate access. Click 'Author Login'.

2) Follow the step-by-step instructions to submit your manuscript.

3) The submission must include the following as separate files:

   - Title page consisting of manuscript title, authors' full names and affiliations, name and address for corresponding author - Editorial Manager Title Page for Manuscript Submission
   - Abstract
APPENDIX A

- Full manuscript omitting authors’ names and affiliations. Figures and tables can be attached separately if necessary.

4) If you require further help in submitting your manuscript, please consult the Tutorial for Authors - Editoriai Manager - Tutorial for Authors
Authors can log on at any time to check the status of the manuscript.

5. Manuscript requirements

- Contributions must be typed in double spacing with wide margins. All sheets must be numbered.
- Tables should be typed in double spacing, each on a separate page with a self-explanatory title. Tables should be comprehensible without reference to the text. They should be placed at the end of the manuscript with their approximate locations indicated in the text.
- Figures can be included at the end of the document or attached as separate files, carefully labelled in initial capital/lower case lettering with symbols in a form consistent with text use. Unnecessary background patterns, lines and shading should be avoided. Captions should be listed on a separate page. The resolution of digital images must be at least 300 dpi.
- For articles containing original scientific research, a structured abstract of up to 250 words should be included with the headings: Objectives, Design, Methods, results, Conclusions. Review articles should use these headings: Purpose, Methods, Results, Conclusions.
- For reference citations, please use APA style. Particular care should be taken to ensure that references are accurate and complete. Give all journal titles in full.
- SI units must be used for all measurements, rounded off to practical values if appropriate, with the Imperial equivalent in parentheses.
- In normal circumstances, effect size should be incorporated.
- Authors are requested to avoid the use of sexist language.
- Authors are responsible for acquiring written permission to publish lengthy quotations, illustrations etc for which they do not own copyright.


6. Brief reports and comments

These allow publication of research studies and theoretical, critical or review comments with an essential contribution to make. They should be limited to 2000 words, including references. The abstract should not exceed 120 words and should be structured under these headings: Objective, Method, Results, Conclusions. There should be no more than one table or figure, which should only be included if it conveys information more efficiently than the text. Title, author and name and address are not included in the word limit.

7. Publication ethics

Code of Conduct - Code of Conduct, Ethical Principles and Guidelines
Principles of Publishing - Principle of Publishing

8. Supplementary data

Supplementary data too extensive for publication may be deposited with the British Library Document Supply Centre. Such material includes numerical data, computer programs, fuller details of case studies and experimental techniques. The material should be submitted to the Editor together with the article, for simultaneous refereeing.

9. Post acceptance
APPENDIX A

PDF page proofs are sent to authors via email for correction of print but not for rewriting or the introduction of new material. Authors will be provided with a PDF file of their article prior to publication.

10. Copyright

To protect authors and journals against unauthorised reproduction of articles, The British Psychological Society requires copyright to be assigned to itself as publisher, on the express condition that authors may use their own material at any time without permission. On acceptance of a paper submitted to a journal, authors will be requested to sign an appropriate assignment of copyright form.

11. Checklist of requirements

- Abstract (100-200 words)
- Title page (include title, authors' names, affiliations, full contact details)
- Full article text (double-spaced with numbered pages and anonymised)
- References (APA style). Authors are responsible for bibliographic accuracy and must check every reference in the manuscript and proofread again in the page proofs.
- Tables, figures, captions placed at the end of the article or attached as separate files
## APPENDIX B

**Table A. Empirical studies considering the relationship between discrimination and depression with Black and minority ethnic samples**

<table>
<thead>
<tr>
<th>Study</th>
<th>Type</th>
<th>Sample</th>
<th>Measure of Discrimination</th>
<th>Measure of Depression</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abouguendia &amp; Noels (2001)</td>
<td>Cross-sectional.</td>
<td>74 South Asian University students living in Canada: 40 1st generation immigrants (excluding refugees and international students); 34 2nd generation immigrants.</td>
<td>Hassles in past few months, each item rated on a 4-point frequency scale 1. General Hassles (18 items) 2. Family Hassles (10 items) 3. Outgroup hassles (related to discrimination) (15 items) 4. Ingroup hassles (11 items) All scales had adequate to excellent internal consistency.</td>
<td>Zung Self-Rating Depression Scale&lt;sup&gt;1&lt;/sup&gt;</td>
<td>1. For 2&lt;sup&gt;nd&lt;/sup&gt; generation South Asian people, general hassles and outgroup hassles were the only significant predictors of depression. 2. For 1&lt;sup&gt;st&lt;/sup&gt; generation South Asian people only in-group hassles predicted depression.</td>
</tr>
<tr>
<td>Bhui et al (2005) (Secondary analysis of Karlsen et al., 2005)</td>
<td>See Karlsen et al. (2005)</td>
<td>2054 respondents from Karlsen et al. (2005) who were in paid employment.</td>
<td>Three individual questions 1. Interpersonal racism 2. Ethnic discrimination within working environment. 3. Refusal of employment due to ethnicity.</td>
<td>See Karlsen et al. (2005)</td>
<td>When adjustment was made for all discrimination, only interpersonal racism and discrimination within work had independent contributions to depression.</td>
</tr>
<tr>
<td>Brown et al. (2000)</td>
<td>Longitudinal community telephone survey.</td>
<td>779 Black Americans</td>
<td>One question regarding racial discrimination</td>
<td>DSM-III-R&lt;sup&gt;2&lt;/sup&gt; Diagnosis. Binary coding of presence or absence of major depression</td>
<td>Longitudinally no association between discrimination and depression. Positive cross-sectional association at one time point but not at the other</td>
</tr>
<tr>
<td>Cassidy, O’Connor, Howe &amp; Warden (2004)</td>
<td>Cross-sectional convenience sample</td>
<td>154 young adults (aged 14-21, mainly students) living in Scotland. 27 Chinese, 39 Indian, 88 Pakistani.</td>
<td>Ethnic discrimination. 6 item frequency scale (no specified time frame). Good internal consistency.</td>
<td>Depression subscale from the HADS&lt;sup&gt;3&lt;/sup&gt; (Cronbach’s alpha for this sample was 0.61)</td>
<td>Positive association between discrimination and depression.</td>
</tr>
</tbody>
</table>

<sup>1</sup> Zung (1965)  
<sup>2</sup> Assessed by Diagnostic Interview Schedule (Robins, Helzer, Croughan & Ratcliff, 1981)  
<sup>3</sup> Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983)
### APPENDIX B

<table>
<thead>
<tr>
<th>Study</th>
<th>Type</th>
<th>Sample</th>
<th>Measure of Discrimination</th>
<th>Measure of Depression</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrada et al. (2001)</td>
<td>Cross-sectional. Convenience sample</td>
<td>333 American Undergraduate students. (208 White, 34 African-American, 31 Hispanic, 60 Asian, Pacific Islander)</td>
<td>Ethnic Discrimination Scale. 17 items measuring the perception of being devalued, threat, aggression and verbal rejection. Time-frame was over the previous 3 months. Acceptable internal consistency.</td>
<td>BDI5</td>
<td>Positive association between discrimination and depression.</td>
</tr>
</tbody>
</table>

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4 Despite the large Euro-American population, the study was included as it measured ethnic discrimination.
5 Beck Depression Inventory (Beck, Ward, Mendelson, Mock & Erbaugh, 1961)
6 Radloff (1977)
## APPENDIX B

<table>
<thead>
<tr>
<th>Study</th>
<th>Type</th>
<th>Sample</th>
<th>Measure of Discrimination</th>
<th>Measure of Depression</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaudet, Clement &amp; Deuzeman</td>
<td>Cross-sectional. Snowball sampling through links to Lebanese community</td>
<td>96 1st and 2nd generation Lebanese living in Canada (age 17-50, mean 23 years). Less than 1/3 second generation. 66% at University or obtained University degree.</td>
<td>2 six item inventories: 1. Personal ethnic discrimination 2. Collective ethnic discrimination Both had acceptable to good internal consistency</td>
<td>CES-D (Good internal consistency)</td>
<td>Positive association for personal and collective discrimination with depression. Strong Lebanese identity protective for depression. Strong Canadian identity risk factor for depression.</td>
</tr>
<tr>
<td>Jackson, Hogue &amp; Phillips</td>
<td>Cross-sectional. Convenience sample through advertisements</td>
<td>301 African American Women aged 18 to 79. 72.5% were college educated or above.</td>
<td>2 discrimination subscales[^9] measured on Likert Scale: 1. Race / racism scale (17 items) measuring experiences and anticipation of racism 2. Work (10 items) measuring gender / racial oppression in the workplace. Both had adequate to good internal consistency.</td>
<td>National Health Interview Schedule for measuring depression: 2 subscales 1. Role impairment 2. Frequency and interruption Internal consistency of scale not reported.</td>
<td>Positive correlations found between the two discrimination measures with the two depression subscales.</td>
</tr>
</tbody>
</table>

[^7]: See Taylor, Wright, Moghaddam & Lalonde (1990)
[^8]: Beck, Steer and Brown (1996)
[^9]: Scale constructed through prior qualitative study
### APPENDIX B

<table>
<thead>
<tr>
<th>Study</th>
<th>Type</th>
<th>Sample</th>
<th>Measure of Discrimination</th>
<th>Measure of Depression</th>
<th>Findings</th>
</tr>
</thead>
</table>
| Karlsen & Nazroo (2002)                    | Cross-sectional.                    | 2507 ethnic minorities living in the UK. (Note: the discriminatory question was only asked to half the original 5196) | Two individual questions  
1. Interpersonal racism  
2. Perception of employers as discriminatory. | Diagnosis. Clinical Interview Schedule-Revised\(^{10}\). Validated by the Present State Exam\(^{11}\). Analysed in binary manner as presence or absence of depression in the previous week. | Positive association between interpersonal racism and depression. Study does not report if there was an association between the perception of employers as discriminatory and depression. |
| Karlsen, Nazroo, McKenzie, Bui & Weich (2005) (see also Bhui et al., 2005, below) | Cross-sectional. Weighted, stratified probability sample of ethnic minority group within England. With a white comparison group. | 3446 ethnic minorities; 733 Irish, 691 Caribbean, 650 Indian, 724 Pakistani. 68% response rate | Three individual questions  
1. Interpersonal racism  
2. Personal experience of racial discrimination within employment field.  
3. General perception of employers as racially discriminatory. | Revised Clinical Interview Schedule measuring Common Mental Disorder (CMD; anxiety disorder or depression). Dichotomised as presence or absence of CMD at cut off point of 12 or above. | Regression analysis indicated all three types of discrimination significantly increased the risk of CMD. |
1. Life- time frequency scale  
2. Last year frequency scale  
3. Appraisal of the stressfulness of the event  
Good internal consistency | Depression subscale of the Symptom Checklist-58\(^{12}\) | Positive association between discrimination and depression, even after controlling for status and generic life events. |

\(^{10}\) Lewis, Pelosi, Araya and Dunn (1992)  
\(^{11}\) Wing, Cooper and Sartorius (1974)  
\(^{12}\) Despite the study measuring CMD and not specifically depression, the study was included as it was a nationally representative sample  
\(^{13}\) Derogatis, Lipman, Rickles, Ulenhuth & Covi (1994).
### APPENDIX B

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<th>Measure of Depression</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Landrine &amp; Klonoff (1996)</td>
<td>Cross-sectional, convenience sample</td>
<td>153 African Americans (students and staff at a large University)</td>
<td>The schedule of racist events. 18 items of racist events each rated on: 1. Life-time frequency scale 2. Last year frequency scale 3. Appraisal of stressfulness of event Good internal consistency</td>
<td>Depression subscale of the HSCL-58 (^ {14})</td>
<td>Positive association between discrimination and depression.</td>
</tr>
<tr>
<td>Moghaddam, Taylor, Ditto, Jacobs &amp; Bianchi (2002)</td>
<td>Cross-sectional. Convenience sample.</td>
<td>104 female Canadians who had immigrated form India (All were married)</td>
<td>Racial discrimination. 3 questions (analysed separately). Each rated on 9 point scale. 1 item on Personal discrimination (frequency). 2 items on perceptions of society as discriminatory (agreement with statement)</td>
<td>Depression subscale from abbreviated version of Symptom Distress Checklist (^ {15})</td>
<td>No association</td>
</tr>
<tr>
<td>Mossakowski (2003)</td>
<td>Cross-sectional community sample. Stratified probability sample based on census</td>
<td>2109 Filipino Americans</td>
<td>1. Lifetime racial/ethnic discrimination (presence or absence) 2. 8 item everyday discrimination scale, rated in the past month (Good internal consistency)</td>
<td>Depressive symptom subscale (^ {16})</td>
<td>Positive association between discrimination and depression.</td>
</tr>
</tbody>
</table>

\(^ {14}\) Hopkins Symptom Checklist (Derogatis et al., 1994)

\(^ {15}\) Derogatis, Lipman, Covi, Rickels and Uhlenhuth (1970)

\(^ {16}\) Derogatis (1994)

\(^ {17}\) Beiser and Fleming (1986)
# APPENDIX B

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<th>Measure of Depression</th>
<th>Findings</th>
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</thead>
<tbody>
<tr>
<td>Pavalko, Mossakowski &amp; Hamilton (2003)</td>
<td>Longitudinal. Originally a nationally representative sample of women in 1967. Current data analysed between 1985 and 1989.</td>
<td>1,778 American women aged 30-44 at onset of study in 1967. The analysis was based on women who had been in work. Ethnicity was 1,329 White and 449 Black. Retention rate of 60% over 22 years</td>
<td>Binary recording of work-based discrimination due to multiple reasons in the previous 5 years.</td>
<td>CES-D at 1989. (Cronbach’s Alpha 0.71). Analysed as a categorical variable.</td>
<td>White group: Prospective and contemporary association between discrimination and depression. Black group: No association.</td>
</tr>
<tr>
<td>Pernice &amp; Brook (1996)</td>
<td>Cross-sectional, convenience sample</td>
<td>249 immigrants to New Zealand (129 South East Asian, 57 Pacific Islanders and 63 British).</td>
<td>No clear description of how discrimination was assessed.</td>
<td>13 item depressive symptom subscale</td>
<td>Positive association between discrimination and depression.</td>
</tr>
<tr>
<td>Prelow, Danoff-Burg, Swenson &amp; Pulgiano (2004)</td>
<td>Cross-sectional, convenience sample.</td>
<td>260 Students (14-18 years old). 119 European Americans, 141 African Americans.</td>
<td>6-item perceived discrimination scale, measuring the presence or absence of discriminatory events in last 3 months. No internal consistency reported.</td>
<td>CES-D12 (1 item removed post hoc to increase internal consistency)</td>
<td>No association between discrimination and depression when ecological risk and neighbour disadvantage entered into analysis.</td>
</tr>
</tbody>
</table>

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18 Noh, Avison and Kaspar (1992); Noh, Kaspar and Chen (1998)
19 The Hopkins Symptom Checklist-25 (Hesbacher, Rickels, Morris, Newman and Rosenfield, 1980; Mollica et al., 1986)
20 Study included as it considered the interaction between ‘race’ and discrimination.
21 12 item Center for Epidemiological Studies Depression Scale (CES-D12) (Roberts & Sobhan, 1992)
<table>
<thead>
<tr>
<th>Study</th>
<th>Type</th>
<th>Sample</th>
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<th>Measure of Depression</th>
<th>Findings</th>
</tr>
</thead>
</table>
2. Socio economic discrimination scale: Sum of discrimination due to socio-economic status (SES). Adequate internal consistency | Modified version of CES-D: 7 of the original 20 items were used. High correlation with original CES-D. | 1. Racial and SES discrimination were both related to CES-D.  
2. African Americans more likely to report higher incidences of racial and SES discrimination. |
| Salgado de Snyder (1987)          | Cross-sectional. Telephone survey. Selected from marital records | 140 female Mexican immigrants to America (married and must have immigrated after the age of 14) Low response rate. | 1 question asking the presence or absence of ethnic / racial discrimination in the last 3 months. | CES-D (Spanish version)                                          | Positive association. The group experiencing discrimination had higher depression scores than those not experiencing discrimination. |
| Sellers, Caldwell, Schmeelk-Cone, Zimmerman (2003) | Longitudinal study, however, analysis of discrimination and depression was cross-sectional. Restricted to students who were “academically at risk” | 555 African-American young adults (mean age was 17.8 years) from educational facilities. | 20 item measure of racial hassles over the last year (rated on a 6 point scale). No internal consistency stated. | Six-item depression subscale of Brief Symptom Inventory. | Positive association between discrimination and depression. |

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22 Mirowsky and Ross (1991)  
23 Derogatis and Spencer (1982)
## APPENDIX B

<table>
<thead>
<tr>
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<th>Type</th>
<th>Sample</th>
<th>Measure of Discrimination</th>
<th>Measure of Depression</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Siefert, Bowman, Heflin, Danziger &amp; Williams (2000)</strong></td>
<td>Cross-sectional. Randomly selected from one American county.</td>
<td>331 White and 422 African-American women receiving welfare benefits.</td>
<td>Multiple questions assessing racial and gender discrimination related to employment. No internal consistency given. No report given of how items were rated.</td>
<td>Diagnosis using Composite International Diagnostic Interview(^{24}) Comparison between depressed and non-depressed groups</td>
<td>Positive association between discrimination and depression. Depressed group reported higher discrimination than non-depressed group.</td>
</tr>
<tr>
<td><strong>Turner &amp; Avison (2003)</strong></td>
<td>Cross-sectional follow-up data. 76.4% follow-up rate. Original sample was representative of those in educational system</td>
<td>899 18-22 year olds(^{25}), 493 non-Hispanic White and 406 African American</td>
<td>Range of discrimination (e.g. gender, racial etc) on two measures 1. Major life-time experience (Binary counts on 9 items) 2. Chronic daily hassles (Frequency scale on 9 items). Both good internal reliability</td>
<td>Depressive symptoms on the CES-D</td>
<td>African Americans had significantly higher levels of lifetime discrimination and chronic daily hassles than non-Hispanic Whites. Daily hassles, but not life discrimination, positively associated to depression.</td>
</tr>
<tr>
<td><strong>Utsey &amp; Payne (2000)</strong></td>
<td>Cross-sectional, convenience samples</td>
<td>2 groups: 56 African American men from a residential substance abuse program. 70 African American undergraduate students</td>
<td>Index of Race-Related Stress (Brief Version)(^{26}) 22 items each rated on 5-point scale, measuring the occurrence and stress of racist events. Excellent internal consistency</td>
<td>BDI-II(^{27}) Good internal consistency for both groups</td>
<td>No association. Non-significant small to medium sized positive correlations found between racist stress scale and depression for both groups.</td>
</tr>
<tr>
<td><strong>Whitbeck, McMorris, Hoyt, Stubben &amp; Lafronboise (2002)</strong></td>
<td>Cross-sectional, convenience sample.</td>
<td>287 American Indians who had children</td>
<td>10-items measuring perceived discrimination each rated on a 4-point frequency scale. Good internal consistency.</td>
<td>CES-D. Analysed in a binary manner at a cut-off point of 16.</td>
<td>Positive association between discrimination and depression.</td>
</tr>
</tbody>
</table>

---

\(^{24}\) WHO (1990)  
\(^{25}\) This study was included as the analysis took account of 'stressors' affecting African Americans  
\(^{26}\) Utsey (1999)  
\(^{27}\) Beck, Steer and Brown, 1996)
APPENDIX C

PANAS

*Using the 5-point scale below, please rate the extent to which you have experienced the following emotions in the last few weeks?*

1 – Very slightly or not at all  
2 – A little  
3 – Moderately  
4 – Quite a bit  
5 – Very much

<table>
<thead>
<tr>
<th>Emotion</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interested</td>
<td></td>
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<tr>
<td>Distressed</td>
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<tr>
<td>Excited</td>
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<tr>
<td>Upset</td>
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<tr>
<td>Strong</td>
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<tr>
<td>Guilty</td>
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<tr>
<td>Scared</td>
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<td>Hostile</td>
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<tr>
<td>Enthusiastic</td>
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<tr>
<td>Proud</td>
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<tr>
<td>Irritable</td>
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<tr>
<td>Alert</td>
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<tr>
<td>Ashamed</td>
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<tr>
<td>Inspired</td>
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<tr>
<td>Nervous</td>
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<tr>
<td>Determined</td>
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<tr>
<td>Attentive</td>
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<tr>
<td>Jittery</td>
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<tr>
<td>Active</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afraid</td>
<td></td>
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</tr>
</tbody>
</table>
APPENDIX D

Ethnic Day-to-Day Discrimination Scale

Please circle the number that indicates generally how often in your day-to-day life the following things have happened to you because of your ethnicity / race?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>You are treated with less courtesy than other people</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>You receive poorer service than other people in restaurants or shops</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>People act as if you are not smart</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>People act as if they are afraid of you</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>People act as if they think you are dishonest</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>People act as if they are better than you are</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>You are called names or insulted</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>You are threatened or harassed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX E

OAS SCALE

We are interested in how people think others see them. Below is a list of statements describing feelings or experiences about how you may feel other people see you.

Read each statement carefully and circle the number to the right of the item that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement. Please use the scale below.

0 = NEVER  1 = SELDOM  2 = SOMETIME S  3 = FREQUENTLY  4 = ALMOST ALWAYS

<table>
<thead>
<tr>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel other people see me as not good enough.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>2. I think that other people look down on me.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>3. Other people put me down a lot.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>4. I feel insecure about other opinions of me.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>5. Other people see me as not measuring up to them.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>6. Other people see me as small and insignificant.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>7. Other people see me as somehow defective as a person.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>8. People see me as unimportant compared to others.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>9. Other people look for my faults.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>10. People see me as striving for perfection but being unable to reach my own standards.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>11. I think others are able to see my defects.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>12. Others are critical or punishing when I make a mistake.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>13. People distance themselves from me when I make mistakes.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>14. Other people always remember my mistakes.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>15. Others see me as fragile.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>16. Others see me as empty and unfulfilled.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>17. Others think there is something missing in me.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>18. Other people think I have lost control over my body and feelings.</td>
<td>0 1 2 3 4</td>
</tr>
</tbody>
</table>
APPENDIX F

Belongingness to Ethnic Community

The following statements concern how you feel towards people within your ethnic community. We are interested in your general experience with people in your ethnic community. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following scale.

<table>
<thead>
<tr>
<th>Disagree Strongly</th>
<th>Neutral / mixed</th>
<th>Agree strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

1. I interact little with people from my ethnic community.
2. I do not feel emotionally close to people in my ethnic community.
3. I see people from my ethnic community a lot.
4. I feel people from my ethnic community care about me.
5. I do not socialise with people from my ethnic community much.
6. I feel emotionally close to people in my ethnic community.
7. I have a lot of contact with people from my ethnic community.
8. I feel people in my ethnic community do not care about me.
Dear Steven Coles

Your project (Experience of ethnic discrimination and mood: Exploring the explanatory power of social ranking and attachment models) has been approved by the School of Psychology Ethics Committee.

Please keep a copy of this e-mail as proof of acceptance and for your records.

We wish you every success with your study.

Andrew M. Colman
Chair of Ethics Committee
18 August 2005

Steven Coles
c/o School of Psychology (Clinical Section)
University of Leicester
104 Regent Road
Leicester
LE1 7LT

Dear Steven

Re: ethics application for 'Exploring the explanatory power of social ranking and attachment models'

I am writing to inform you that after consideration and review your application for ethical approval for the above named research project has been given approval by Chair's Action.

Minor ethical issues were identified and have been resolved. Should further ethical issues arise during the project then you should bring these to the attention of the Faculty Research Ethics Committee in writing.

Yours sincerely,

Professor Paul Whiting
Chair of the Faculty Research Ethics Committee

e-mail: HLSFRO@dmu.ac.uk

cc: Dr Steven Allan
    Prof Paul Gilbert
    file
APPENDIX H
Experience of Ethnic Discrimination and Mood
June 2005

INFORMATION SHEET
Experience of Ethnic Discrimination and Mood

Project Team:
Steven Coles
Trainee Clinical Psychologist (Leicestershire Partnership NHS Trust and University of Leicester)

Dr Steve Allan
Clinical Psychologist (University of Leicester)

Prof. Paul Gilbert
Clinical Psychologist (Derbyshire Mental Health Trust and Derby University)

You are being invited to take part in a research project. The project is looking at the experience of ethnic discrimination and mood. The project is also looking at the relationship people have with their ethnic communities and how they see themselves. The project will look at how this is related to psychological well-being. The following sheet will outline the project.

Please take time to read this sheet, before you decide whether you want to take part in the project. Please contact one of the research team members on 0116 223 1648, if there is anything that is not clear or if you would like more information.

What is the purpose of the study?
The study aims to better understand ethnic discrimination, mood and psychological well-being. It is hoped that this information will be useful in improving psychological therapy for culturally diverse communities.

Why have I been chosen?
All students within participating Universities departments and societies have been invited to participate in the study.

What will be involved if I take part in the study?
Your involvement will consist of completing 4 self-completion questionnaires and a general information sheet, which should taken around 10 – 15 minutes in total to complete. The questionnaires ask a variety of questions regarding discrimination, your mood, how you see yourself, your relationship to your ethnic community and other psychological issues. Your name will NOT be asked for, but other information such as your gender and ethnicity will be asked for.

Will the information obtained in the study be confidential?
You will not be personally identified in any documents relating to the study. All information will be treated with a high degree of confidentiality under the data protection act. All information shall be stored securely. Only the researchers (named at the top of the page) will have access to the data.

As well as informing therapeutic practice, it is hoped that the project can be written up and submitted as part of a Doctorate in Clinical Psychology qualification being undertaken by Steven Coles, at the University of Leicester.
APPENDIX H
Experience of Ethnic Discrimination and Mood
June 2005

What happens if I do not wish to participate in this study or wish to withdraw from the study?
It is up to you to decide whether or not to take part in this project. If you do not wish to participate or if you wish to withdraw from the study you may do so at any time without justifying your decision. There will be no consequences to your withdrawal from the study.

If I take part in the project, what happens if I have any questions or concerns about the project?
Steven Coles will be available to discuss the research following completion of the questionnaires. The project team can also be contacted on the telephone number below, before or after the project.

Included below are contact details of organisations where you can discuss issues to do with discrimination. These organisations are independent of the research.

Thank you for taking the time to read this information.

Contact Information
For specific information of this project:
Steven Coles (Chief Investigator)
Tel: 0116 223 1648

For general information and advice on racial/ethnic discrimination:
(1) Commission for Racial Equality
www.cre.gov.uk

(2) Leicester Racial Equality Council
Epic House, Floor 3
Lower Hill Street
Leicester
LE1 3SH
Tel: 0116 299 9800
e-mail: administrator@lrec.org.uk
### APPENDIX I

**Ethnic discrimination and mood**  
**June 2005**

#### Demographic Sheet

*Please tick the appropriate boxes*

<table>
<thead>
<tr>
<th><strong>Gender</strong></th>
<th>□ Male</th>
<th>□ Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age Group</strong></td>
<td>□ 18-21</td>
<td>□ 22-30</td>
</tr>
<tr>
<td><strong>Current education Status</strong></td>
<td>□ Undergraduate</td>
<td>□ Postgraduate</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td>□ Single</td>
<td>□ Married</td>
</tr>
<tr>
<td></td>
<td>□ Widowed</td>
<td>□ Separated / divorced</td>
</tr>
<tr>
<td></td>
<td>□ Living with Partner</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Other (please specify)</td>
<td></td>
</tr>
<tr>
<td><strong>Living Status (University term time)</strong></td>
<td>□ Student halls</td>
<td>□ Student House</td>
</tr>
<tr>
<td></td>
<td>□ On your own</td>
<td>□ With partner</td>
</tr>
<tr>
<td></td>
<td>□ With your parents</td>
<td>□ With other family</td>
</tr>
<tr>
<td></td>
<td>□ Other (please specify)</td>
<td></td>
</tr>
<tr>
<td><strong>Ethnic Origin</strong></td>
<td>□ White &amp; Black Caribbean</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ White &amp; Black African</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ White &amp; Asian</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Other Mixed (please specify)</td>
<td></td>
</tr>
<tr>
<td><strong>Asian or Asian British</strong></td>
<td>□ Indian</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Pakistani</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Bangladeshi</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Other Asian (please specify)</td>
<td></td>
</tr>
<tr>
<td><strong>Black or Black British</strong></td>
<td>□ Caribbean</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ African</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Other Black (please specify)</td>
<td></td>
</tr>
<tr>
<td><strong>White</strong></td>
<td>□ British</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Irish</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Other White (please specify)</td>
<td></td>
</tr>
<tr>
<td><strong>Other Ethnic Groups</strong></td>
<td>□ Chinese</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Other ethnic group (please specify)</td>
<td></td>
</tr>
</tbody>
</table>

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**APPENDIX J**

**Formula for Testing the Significance of Mediation**

**Mediation Pathway**

\[ \text{Predictor} \rightarrow \text{Mediator} \rightarrow \text{Outcome} \]

**Mediation analysis**

Equation 1: Effect of predictor on outcome
Equation 2: Effect of predictor on mediator (path a)
Equation 3: Effect of mediator and predictor on outcome (note effect of mediator on outcome is path b)

Formula for testing the significance of the mediated effect

\[
Z = \frac{ab}{\sqrt{b^2s_a^2 + a^2s_b^2 + s_a^2}}
\]

- \(a\) = unstandardised beta of predictor to mediator (equation 2)
- \(b\) = unstandardised beta of mediator to outcome (equation 3, path b)
- \(s_a\) = standard error of \(a\)
- \(s_b\) = standard error of \(b\)
- \(Z\) = standardised \(Z\) score of mediated effect (\(Z\) scores above 1.96 are significant)
### Hypotheses 1 to 6 for BME group

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Supported?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. As ethnic discrimination increases mood will lower</td>
<td>Supported for negative affect</td>
<td>Medium sized correlation with negative affect</td>
</tr>
<tr>
<td></td>
<td>Nearing significance with positive affect</td>
<td>Small to medium sized correlation with positive affect</td>
</tr>
<tr>
<td>2. As ethnic discrimination increase so will external shame</td>
<td>Supported</td>
<td>Large correlation between ethnic discrimination and external shame</td>
</tr>
<tr>
<td>3 External shame will mediate the relationship between discrimination and mood</td>
<td>Supported for both negative and positive affect</td>
<td>Despite correlation between discrimination and positive affect not quite reaching significance, the mediation analysis was highly significant (more significant than with negative affect).</td>
</tr>
<tr>
<td>4. As belongingness increases, so will mood</td>
<td>Supported for positive affect</td>
<td>Medium sized correlation with positive affect</td>
</tr>
<tr>
<td></td>
<td>Not supported for negative affect</td>
<td>Correlation very small with negative affect</td>
</tr>
<tr>
<td>5. As ethnic discrimination increases, so will belongingness to ethnic community</td>
<td>Not supported</td>
<td>Very small correlation between the 2 variables</td>
</tr>
<tr>
<td>6. Belongingness will mediate the relationship between discrimination and mood</td>
<td>Not supported</td>
<td></td>
</tr>
</tbody>
</table>

1 Low mood being either low positive affect or high negative affect
## Hypotheses 1 to 6 for WB group

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Supported?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. As ethnic discrimination increases mood will lower&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Supported for negative affect</td>
<td>Medium sized correlation with negative affect</td>
</tr>
<tr>
<td></td>
<td>Not supported with positive affect</td>
<td>Very small correlation with positive affect</td>
</tr>
<tr>
<td>2. As ethnic discrimination increases so will external shame</td>
<td>Supported</td>
<td>Medium sized correlation between ethnic discrimination and external shame</td>
</tr>
<tr>
<td>3. External shame will mediate the relationship between discrimination and mood</td>
<td>Partially supported for negative affect</td>
<td>With external shame entered, discrimination no longer predicts negative affect, suggesting mediation. The significance test of mediation is very close to significance ($p=0.054$)</td>
</tr>
<tr>
<td>4. As belongingness increases, so will mood</td>
<td>Not supported for positive or negative affect</td>
<td>Small to medium and non-significant non-parametric correlation between belongingness and positive affect. Small and non-significant correlation between belongingness and negative affect</td>
</tr>
<tr>
<td>5. As ethnic discrimination increases, so will belongingness to ethnic community</td>
<td>Not supported</td>
<td>Very small correlation between the 2 variables</td>
</tr>
<tr>
<td>6. Belongingness will mediate the relationship between discrimination and mood</td>
<td>Not supported</td>
<td></td>
</tr>
</tbody>
</table>

<sup>2</sup> Low mood being either low positive affect or high negative affect
## Hypotheses 7 to 9 differences between groups

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Supported?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. The BME group will report more ethnic discrimination than the WB group</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>8. The relationship between discrimination and mood will be stronger for the BME than the WB group</td>
<td>Not supported for negative affect For positive affect significance was ((p=0.061)) Close to significance for positive affect</td>
<td></td>
</tr>
<tr>
<td>9. The relationship between discrimination and shame will be stronger for the BME than the WB group</td>
<td>Supported</td>
<td></td>
</tr>
</tbody>
</table>
13 October 2005

Mr Steven Coles
Trainee Clinical Psychologist
Leicestershire Partnership NHS Trust; University of Leicester
University of Leicester
104 Regent Road
Leicester
LE1 7RH

Dear Mr Coles

Full title of study: Experience of discrimination and mood in a South Asian women’s support group: Exploring the explanatory power of social ranking and attachment models

REC reference number: 05/Q2401/123

Thank you for your letter of 04 October 2005, responding to the Committee’s request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chairman.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

Ethical review of research sites

The favourable opinion applies to the research sites listed on the attached form.

Conditions of approval

The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

Continued/
### Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

<table>
<thead>
<tr>
<th>Document</th>
<th>Version</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>4.1</td>
<td>23 August 2005</td>
</tr>
<tr>
<td>Investigator CV CV-SHORT FORM</td>
<td>1 - CI/PI</td>
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</tr>
<tr>
<td>Investigator CV Lecturer in Clinical Psychology</td>
<td>1 - Academic Supervisor</td>
<td></td>
</tr>
<tr>
<td>Investigator CV</td>
<td>1 - Clinical Supervisor</td>
<td></td>
</tr>
<tr>
<td>Protocol</td>
<td>1</td>
<td></td>
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<tr>
<td>Peer Review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire Attachment</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Questionnaire Belongingness</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Questionnaire Ethnic Day to Day Discrimination Scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire Gender Day-to-Day</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Questionnaire OAS Scale</td>
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<td></td>
</tr>
<tr>
<td>Questionnaire PANAS</td>
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<td></td>
</tr>
<tr>
<td>Participant Information Sheet</td>
<td>2</td>
<td>04 October 2005</td>
</tr>
<tr>
<td>Response to Request for Further Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demographic Sheet</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### Research governance approval

The study should not commence at any NHS site until the local Principal Investigator has obtained final research governance approval from the R&D Department for the relevant NHS care organisation.

### Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

---

05/Q2401/123 Please quote this number on all correspondence

With the Committee's best wishes for the success of this project

Yours sincerely

[Signature]

Peter Korczak
Chairman
Derbyshire Local Research Ethics Committee

Email: jenny.hancock@derwentsharedservices.nhs.uk

Enclosures: Standard approval conditions
            Site approval form

SF1 list of approved sites

An advisory committee to Trent Strategic Health Authority