Is there a disparity in the rate of acceptance of Black applicants onto Clinical Psychology training courses, compared with other applicants?
If so, are there identifiable reasons for this?

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Commissioned by The Clearing House for Clinical Psychology

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Commissioning

The Clearing House for Post Graduate Courses in Clinical Psychology (CHPCCP) processes most applications from prospective candidates who are seeking a place on a UK Clinical Psychology doctoral training course. The CHPCCP routinely collects, and then publishes equal opportunities monitoring data for each cohort on its website. They had noted that there appeared to be a lower success rate for Black applicants, than for candidates classifying themselves within other ethnic groups. The CHPCCP wanted to ascertain if this observed difference was statistically significant, and if so were there any identifiable reasons for this. They commissioned this project with the aim of answering those questions, using data from the 2006 cohort.

Background

Ethnic Demographics of Clinical Psychologists

In the UK 7.9% of the population are from an ethnic minority, which translates into 4.6 million people (ONS, 2003). The available evidence indicates that the percentage of psychologists from ethnic minority backgrounds falls short of these figures. In the English Survey of Applied Psychologists, only 5.8% of respondents described themselves as being from an ethnic minority. Most applied psychologists were reported to be both white and female (DOH, HO, & BPS, 2004). In a Department of Health report it was found that 7.4% of qualified Clinical Psychologists came from minority backgrounds (DOH, 2004). A British Psychological Society (BPS) Division of Clinical Psychology (DCP) survey of members, reported 94% as describing themselves as White, 3% as Asian and approximately a total of 1% for those categorizing themselves as Black, Chinese and Mixed (ONS, 2003; Turpin & Fensom, 2004). These figures are unsurprising given the results of earlier research examining data about trainees from twenty two courses between 1957 and 1984 finding only 4% to be from ethnic minorities (Bender & Richardson, 1990). The under representation of people from Black and minority ethnic (BME) backgrounds within clinical psychology is counter to the NHS's aim to provide a workforce that mirrors the cultural and ethnic makeup of those whom it delivers services to (DOH, 2000, 2002, 2003). The lack of diversity in the profession restricts clients' ability to choose to have therapists from similar backgrounds. It also threatens the perception of the service as being relevant and accessible to minority groups (Turpin & Fensom, 2004; Williams, Turpin, & Hardy, 2006).

Undergraduate Ethnic Demographics

Some work examining the ethnicity of people accepted onto undergraduate psychology courses between 1998-2001 found 12% declared themselves to be from an ethnic minority, while 82% reported being from a White background (Turpin & Fensom, 2004). This is lower than the 15.2% of undergraduates as a whole from ethnic minorities of which 3.6% declared themselves to be Black Caribian, Black African or Black other. This compares to 2.6% of the working age population (Connor, Tyers, Davis, & Tackey, 2003). In contrast, certain subjects such as medicine, dentistry, law and business studies ethnic minorities are proportionally over

represented (24% in law) (Connor, Tyers, Davis, & Tackey, 2003). Thus while the evidence indicates psychology is not as popular as some professional subjects among ethnic minorities students, there is still a significant pool of applicants from which to attract potential clinical psychologists. Most worrying is that while 9.4% of applications for clinical training come from people from ethnic minority background, they only constitute 6.4% of successful applicants (Turpin & Fensom, 2004).

Clinical Psychology Doctoral Program Entrance Requirements

Although courses differ slightly in their entrance requirements, there is an established minimum set of entrance requirements for an application to Clinical training to be successful. The candidate should have an undergraduate degree in psychology entitling the holder to graduate basis for registration (GBR) with the BPS. This should be a first or an upper second-class degree; 2.2's will be considered by some courses, but only if the applicant has further evidence of their academic ability such as a completed Masters degree or a PhD. Candidates are also required to obtain some relevant experience prior to training. This is usually in the form of an assistant psychologist post, but other relevant experience is also considered (CHPCCP, 2006). The demand outweighs the availability of training places creating a competitive application process where courses have many applications that meet their minimum requirements and have to find methods to separate who they feel will be the best candidates. Thus those not meeting the minimum requirements such as GBR are sifted out immediately. As with most job applications selection is a two-stage process. Initially each course examines all the application forms pertaining to them; from this they will shortlist a number of candidates for interview. These people are interviewed and subsequently are either offered a place, put on a reserve list, or rejected. Each candidates application form can be used to apply for up to four courses, thus one application form can elicit between 0 and 4 offers of a place. If a candidate has more than one offer they are free to choose which place to accept.

Successful Applications

There has been some research into which qualities within application forms predict success at both the short-listing and interview stage. A piece of research conducted at Lancaster University made an attempt to elucidate the factors predicting successful applications, using the cohort that commenced training in 2000 (Phillips,

Hatton, & Gray, 2004). All applications made by this cohort were examined, and factors relating to demographic, biographical, academic and work experience information were recorded. Most of the factors they found that predicted short-listing were a balanced set of indicators related to the range of competencies required for training. For example educationally, receiving a post 16 education at school, degree class and post graduate qualifications were strongly related to short-listing. In terms of relevant experience a greater number and range of psychology assistant posts was related to short-listing, as were positive references from both clinical and academic referees. In a more recent study looking at two cohorts applications to UCL successful applicants were found to have more A Levels and higher A Level points and attended a private school. A higher degree class, having a degree from an old university, past employment as an assistant psychologist, past employment as a research assistant, the average scores given by clinical and academic referees and having a clinical psychologist as a clinical referee all also differentiated the successful applicants (Scior, Gray, Halsey, & Roth, 2007).

Relevance to Black and Ethnic Minority Applications

The information presented above highlights the reliance on educational attainment to discriminate between candidates for clinical training. There is a range of educational attainment recorded on the application form, from A Level to Degree to post graduate qualifications. There has been some research indicating educational attainments may be different for different ethnic groups. It has been noted that of candidates applying for undergraduate university places, those from BME backgrounds tended to have lower A Level points than White candidates, and were more likely to have re-taken their exams (Shiner & Modood, 2002; UCCA, 1991, 1993). Due to a combination of poorer results and other factors such as favouring local institutions, ethnic minorities tend to be clustered in less prestigious 'new' universities, especially around the London area (Connor, Tyers, Davis, & Tackey, 2003; Shiner & Modood, 2002). Possibly Black candidates are applying with a poorer academic record.

A government report by the DfES (Broecke & Nicholls, 2007) examined ethnicity and degree attainment. It concluded that much, but importantly not all of the attainment gap between minority ethnic communities and White communities could be explained through factors other than ethnicity. They highlighted gender and socio-

economic deprivation amongst other factors. The remaining gap in attainment was found to be largest for people with Black Caribbean and Black African backgrounds. The authors noted that this might have been at least partly explained by other factors they had not considered, for example parental income and education. Another report also suggested that the effects of social class disadvantage may hinder undergraduate acceptances for Black applicants to university (Bhattacaryya, Isan, & Blair, 2003).

Shiner and Modood (2002) reported ethnic minority candidates for undergraduate degrees have been noted to come from less privileged backgrounds. This was backed up by government report that stated 27% of those accepted onto degree courses in 2000 came from lower social classes, but amongst the ethnic minority applicants this figure was as high as 40% (Connor, Tyers, Davis, & Tackey, 2003). Coming from a poorer background may affect a candidate's ability or motivation to pursue a career in clinical psychology as assistant psychologist jobs have traditionally been poorly paid. In the UCL study they found that BME applicants were more than twice as likely to have dependants (Scior, Gray, Halsey, & Roth, 2007). This may affect a person's ability to move around the country to gain relevant experience prior to training.

While much of the research into the area has focused on ethnic minorities in general, due to limited space and time and the request of the commissioners (CHPCCP) this project will focus primarily on candidates describing themselves to be from a Black ethnic group.

Research Questions

1. Is there a difference in the rate of acceptance of Black candidates onto clinical psychology training courses within the 2006 cohort?
2. Is this simply because these candidates are applying without the prerequisite work permit and eligibility for GBR?
3. Are candidates failing at the short-listing stage or at the interview stage?
4. Are the Black candidates applying with a poorer academic record than other ethnic groups?
    (a) Do they have lower A Level points?
    (b) Are they more likely to have attended a new university?
    (c) Are their degree class and post-graduate qualifications different?

5. Do the Black candidates live in more socio economically deprived areas than other candidates?
6. Are Black candidates more likely to have dependants than other candidates?

Method

All applications forms that are sent into the CHPCCP are routinely examined and data from both the application form and the equal opportunities monitoring form are recorded onto a database. The data used by this study included information about each applications success or failure, whether they had a work permit or eligibility for GBR, the candidates degree class and postgraduate qualifications, their post code, whether they reported having any dependants. Also recorded were the candidates' ethnic origins. The ethnicity data contained 26 different categories, for the purpose of data analysis these were grouped into four categories, White, Black, Asian and Mixed. See Appendix 1 for the original categories and numbers within each. While it is accepted that there is great variation between the ethnic groups contained within each category (Mason, 2003), the small numbers in some groups would have made statistical analysis prohibitive. Outlined below are the type of data and procedures used to answer each of the research questions.

1. Is there a difference in the rate of acceptance of Black candidates onto clinical psychology training courses within the 2006 cohort?

The CHPCCP were able to provide total numbers of applicants and total number of successful applicants for each of the 26 ethnic groups. These were then combined into the four main ethnic groupings (White, Black, Asian and Mixed). The frequency data were entered onto an Excel spreadsheet and a Fisher exact test calculated comparing the Black group to all others. Expected cell frequencies in the Black were too low to permit a valid Chi Square calculation.

2. Is this simply because candidates are applying without the prerequisite work permit and eligibility for GBR?

The CHPCCP provided the number of candidates within each of the ethnic groups who had applied without GBR or a work permit. The rates of acceptance for the four main groups were calculated with these candidates excluded. An Excel spreadsheet was used to calculate a Fisher Exact test to determine if the rates of application without GBR or a work permit differed for the Black group. Excel was then used to repeat the Fisher exact calculations from question 1 using a data set where applications without a work permit or GBR had been removed.

3. Are candidates failing at the short-listing stage or at the interview stage?

The CHPCCP provided an Excel file for each of the ethnic groups. This listed every application made to each of the courses, and whether it had been successful in being short-listed for an interview. Each entry had the applicant's registration number (assigned sequentially as the CHPCCP receives the application forms), the name of the course applied for, and a column with true or false indicating whether that application had obtained an interview. Thus each candidate could potentially have generated up to four of these entries with one application form. Using Excel a separate pivot table was created for each ethnic group, this generated the number of 'true' and 'false' entries for each registration number. From this the total number of applications made from that form was calculated. The number of interviews each registration number had been awarded was divided by the total number of applications made with that form (1-4) giving each candidate a score between 0 and 1. This data was pasted into SPSS, the descriptive and frequencies functions were used to check for input errors and to ascertain if the applications by interview scores were normally distributed. All figures fell within expected ranges but examination of the Q-Q plot

revealed they did not fit a normal distribution. A Kruskal Wallis test was conducted to look for difference between the ethnic groups.

4. Are the Black candidates applying with a poorer academic record than other ethnic groups?

The CHPCCP does not routinely collect data on A Level points or the type of higher education institution attended. To answer these questions samples of application forms from each of the ethnic groups were randomly selected. As there were only a small number of Black applicants all their application forms were used. Samples of equal size were then taken from each of the other three ethnic groups. A computer was used to randomly select 50 registration numbers from each ethnic group; these forms were then physically examined.

(a) A Level points

The applicant's total numbers of A Level points were recorded using a five point system as had been used in a previous study (Phillips, Hatton, & Gray, 2004) (A=5, B=4, C=3, D=2, E=1). The University and Colleges Admissions Service (UCAS) tariff system was used to equate Scottish Higher (A=2.5, B=2, C=1.5, D=1) and Advanced Higher (A=5, B=4, E=3, D=2.5) qualifications onto this scale. This data was entered into SPSS. A Q-Q plot confirmed it was normally distributed.

(b) Type of University

The Higher Education Funding Council for England (HEFCE) was able to provide me with a list of 'old' universities that existed before 1992. The institution that awarded the candidate's psychology degree was checked against this list and recorded as either 'old' (pre 1992), 'new' (post 1992) or outside UK. This data was entered into Excel and Chi square calculations conducted.

(c) Degree class and postgraduate qualifications

The CHPCCP were able to provide the total numbers of candidates applying with a PhD, Masters and each of the degree level classifications within each ethnic

group. These numbers were divided by the number of applicants to give the overall rates of each qualification within each ethnic group. The data was entered in Excel and Chi Square and Fisher Exact calculations conducted.

5. Do Black candidates live in more socio economically deprived areas than other candidates?

The CHPCCP provided and Excel file containing both candidates' postcodes and their ethnicity. The postcodes were then converted into Townsend scores of socio economic deprivation[1]. The scores were converted by using the national statistics postcode directory to obtain a grid reference for each of the postcodes. These grid references were then transposed onto electoral wards, and the relevant Townsend scores matched to the ward. Townsend scores for electoral wards are available from the Association of Public Health Observatories (APHO). The Townsend Score is comprised of four variables, unemployment, overcrowding, lack of owner occupied accommodation and lack of car ownership. The score is the sum of the Z scores for each of these variables. Scores above 0 indicate higher levels of deprivation and negative scores indicate lower levels of deprivation. The Townsend score is widely used in research into the effect of socio economic variation both in medical (Morgan, 1983) and psychological research (Self, Oates, Pinnock-Hamilton, & Leach, 2005). It has also been shown to be equally valid in predicting health outcomes as other measures of socio economic deprivation such as the Index of Multiple Deprivation (Hoare, 2003). The data were then entered into SPSS and a one factor independent measures ANOVA calculated after Q-Q plot checks that the data fitted a normal distribution.

[1] I would like to thank Dr Paul Norman from the Geography Department of the University of Leeds for his invaluable help in this process.

6. Are Black candidates more likely to have dependants than other candidates?

The CHPCCP provided data on the number of candidates in each of the ethnic groups who declared having dependents. This was entered in to Excel and a Chi Square calculation was carried out to ascertain if there were any significant differences between the ethnic groups in rate of those declaring dependants.

Results

1. Is there a difference in the rate of acceptance of Black candidates onto clinical psychology training courses within the 2006 cohort?

Table 1 presents the rate of acceptance for the four largest groups along with their 95% confidence intervals. The most salient piece of data in Table 1 is that the Black group's acceptance rate is far lower than the other group's rates of acceptance. Using Fisher's Exact test, an initial comparison between the Black group and the others combined, revealed the rate of acceptance in the black group to be significantly lower than in the other groups combined ($z=-2.96$, $p<0.05$). The Black group's rate of acceptance was also significantly lower than the Asian ($z=-2.11$, $p<0.05$), White ($z=-3$, $p<0.05$) and Mixed race groups ($z=-3$, $p<0.05$).

Table 1. Rate of acceptance with 95% CI for different ethnic groups of applicants

Race	Acceptance Rate (%)
White	23.3
Black	4.1
Asian	17.5
Mixed	27.3
All except Black	23

2. Is this simply because these candidates are applying without the prerequisite work permit and eligibility for GBR?

One initial hypothesis was that the reason for this difference was that more people in the Black group were applying without GBR, or did not have work permit for the UK. The rate of applications that failed to meet these criteria was calculated,

20% of applications from Black applicants, compared to a rate of 7% for the other groups combined. A Fisher Exact test was conducted and this indicated that there was a statistically significant difference in these proportions ($z=3.21$, $p<0.05$). Table 2 presents the rates of acceptance of each of the ethnic groups, with those without GBR or a work permit removed.

Table 2. Rate of acceptance with 95% CI for different ethnic groups of applicants with those without GBR or a work permit removed.

Race	Acceptance Rate (%)
White	25
Black	5.1
Asian	19.4
Mixed	30.5
All except Black	24.8

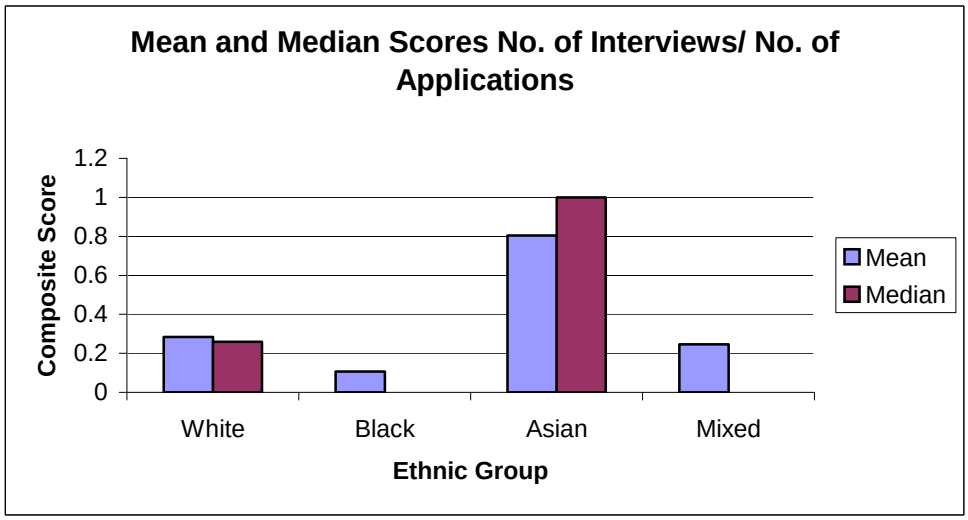
The Fisher Exact test was again carried out comparing the Black group with the others combined using the new dataset. A significant difference between the Black group and the others combined was found ($z=-2.72$, $p<0.05$). The Black group's rate of acceptance was also significantly lower than the White ($z=-2.67$, $p<0.05$) and Mixed race groups ($z=-2.78$, $p<0.05$) but not the Asian ($z=-1.89$, n.s.). Thus the results suggest that while there was significantly greater proportion of Black applications without GBR or a work permit this does not itself account for the marked difference in acceptance rates.

3. Are candidates failing at the short-listing stage or at the interview stage?

Different inferences about any possible bias in the selection procedure would be made depending upon the stage of selection at which candidates fail. Data were collected on the number of interviews each applicant was offered and the number of applications they made to different courses. By dividing the number of interviews by the number applications a composite score in the range 0 - 1 was generated for every applicant in the cohort. This score indicates how successful a candidate was in obtaining an interview. If there were no difference between the groups it would imply some inherent bias in the actual interviews. If a significant difference was found then the bias could be more easily pinpointed to the short-listing procedure.

An independent one factor ANOVA could not be used because the data were not normally distributed; instead a Kruskal- Wallis test was conducted on the data, revealing a significant difference between the groups ($H=289.96$, $df=3$, $p<0.01$). Figure 1. below presents the mean and median values by ethnicity.

Figure 1. Median and Mean Scores for composite score (Number of interviews/ Number of applications).



Further exploratory Kruskal Wallis tests were conducted to elucidate between which groups the differences lay. The Black group was significantly different to a combined group of all others ($H=22.59$, $df=1$, $p<0.01$). There were also significant differences observed between the Black and White groups ($H=18.93$, $df=1$, $p<0.01$) and between the White and Asian ($H=266.28$, $df=1$, $P<0.01$). These results along with figure 1 suggest that Black applicants are less likely to be short-listed for interview than the other ethnic groups. The results also highlight that Asian applicants appear to be particularly successful at this stage of the process.

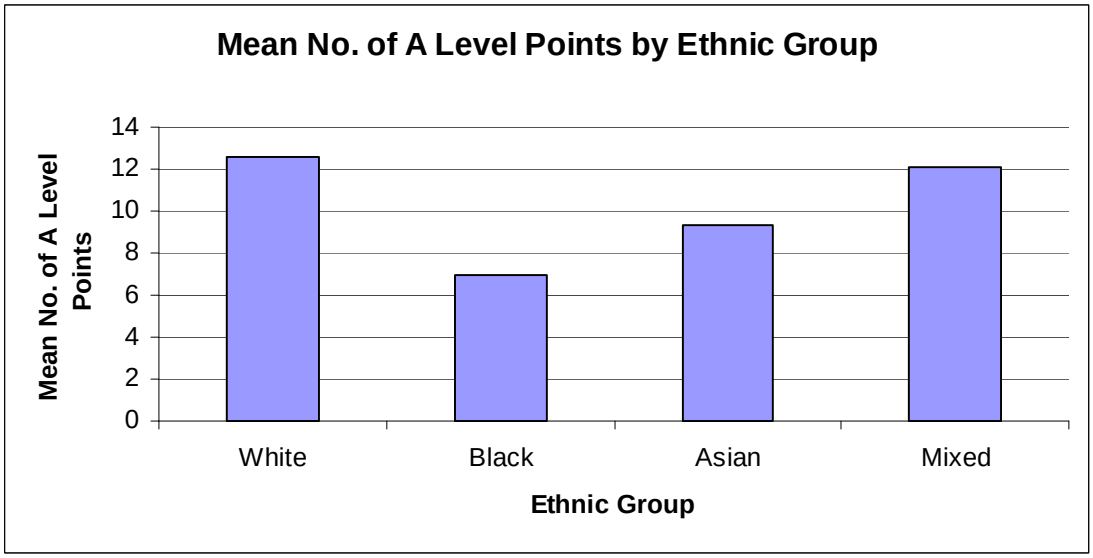
4. Are the Black candidates applying with a poorer academic record than other ethnic groups?

(a) A Level Points

A comparison of the average number of A Level points by ethnic group can be seen in figure 2. It shows the White and Mixed ethnic groups has having the highest number of A Level points, with the Black group the lowest and the Asian group between. A one factor independent measures ANOVA was carried out on the data and

revealed a significant difference between the groups ($F=12.62$, $P<0.01$). Scheffe post hoc analysis confirms what is evident from figure 2. There are significant differences between the White and Black Groups ($p<0.01$) and the White and Asian groups ($p=0.014$). There are also significant differences between the Mixed and Black

Figure 2. The average number of A Level points by each ethnic group.



($p<0.01$) and the Mixed and Asian groups ($p<0.05$). This implies that both Black and Asian candidates attained lower A Level results than the candidates in the White and Mixed groups.

(b) Old or New University

The numbers of applicants in the samples that were awarded their psychology degree by either old or new universities or institutions from outside the UK can be seen in table 3.

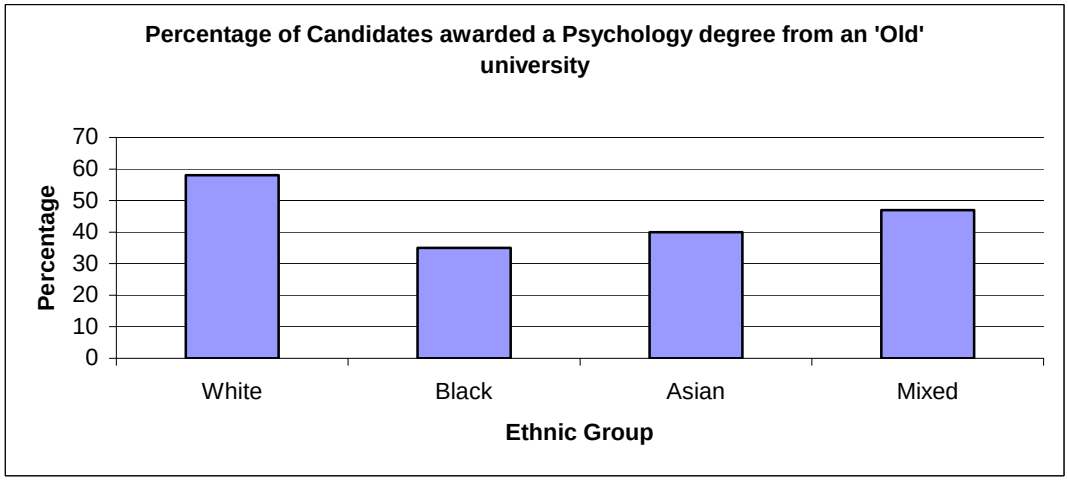
Table 3. The rates of attendance at 'old' or 'new' university or an institution outside the UK by ethnic group.

	Old	Rate	New	Rate	Outside UK	Rate	Total
Black	14	0.35	24	0.60	2	0.05	40
White	31	0.58	17	0.32	5	0.09	53
Asian	20	0.40	27	0.54	3	0.06	50
Mixed	23	0.47	21	0.43	5	0.10	49
All except Black	74	0.49	65	0.43	13	0.09	152

A Chi square test was carried out on these data but due to expected frequencies falling below 5 in some cells the results of this analysis are not valid. This

was caused by the small frequency of applicants who had attended universities outside of the UK. As they are in relatively small numbers and the proportion for each group is similar I have elected to exclude these candidates from the analysis. The subsequent rates of attendance at 'old' and 'new' universities can be seen in figure 3.

Figure 3. Rates of attendance at 'Old' pre 1992 and 'New' post 1992 universities



A two by four Chi square test was then done comparing institution type (pre/ post 1992) and race (White, Black, Asian, Mixed). The results indicated a significant difference in the observed rates (X^2=23.28, df=3, p<0.01). Further chi square tests were conducted to ascertain between which groups these differences lay. As with the A-level points both the Black (X^2=6.54, df=1, p<0.05) and Asian (X^2=4.63, df=1, p<0.05) groups had a significantly lower rate of attendance at pre 1992 universities than the White group.

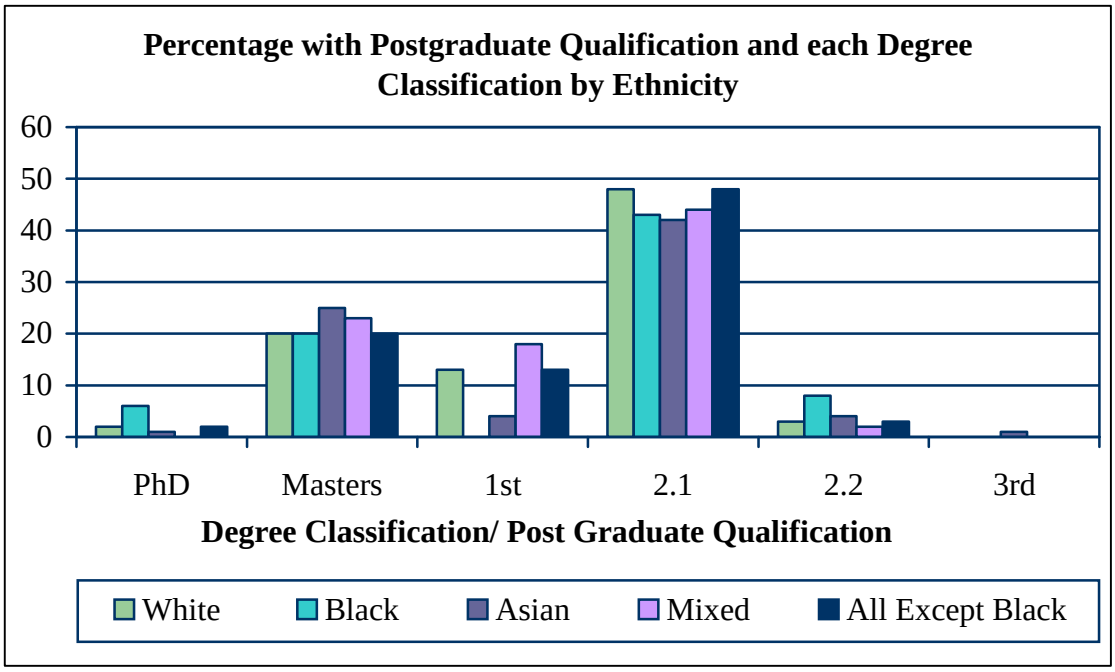
(c) Degree Class and Postgraduate Qualifications

Data were collated on the numbers with each degree classification within each ethnic group, as well as numbers possessing a PhD or a Masters qualification. These figures can be seen in table 4 and represented graphically in figure 4.

Table 4. Numbers of and percentage obtaining each degree classification and possession of a Masters or PhD by ethnicity.

	PHd	Rate	Masters	Rate	1st	Rate	2.1	Rate	2.2	Rate	3rd	Rate	Total
White	42	0.02	415	0.20	285	0.13	1030	0.48	61	0.03	2	0.00	2126
Black	3	0.06	10	0.20	0	0.00	21	0.43	4	0.08	0	0.00	49
Asian	1	0.01	40	0.25	7	0.04	67	0.42	7	0.04	1	0.01	160
Mixed	0	0.00	15	0.23	12	0.18	29	0.44	1	0.02	0	0.00	66

Figure 4. Percentage of applicants obtaining each degree classification and possession of a Masters or PhD by ethnicity.



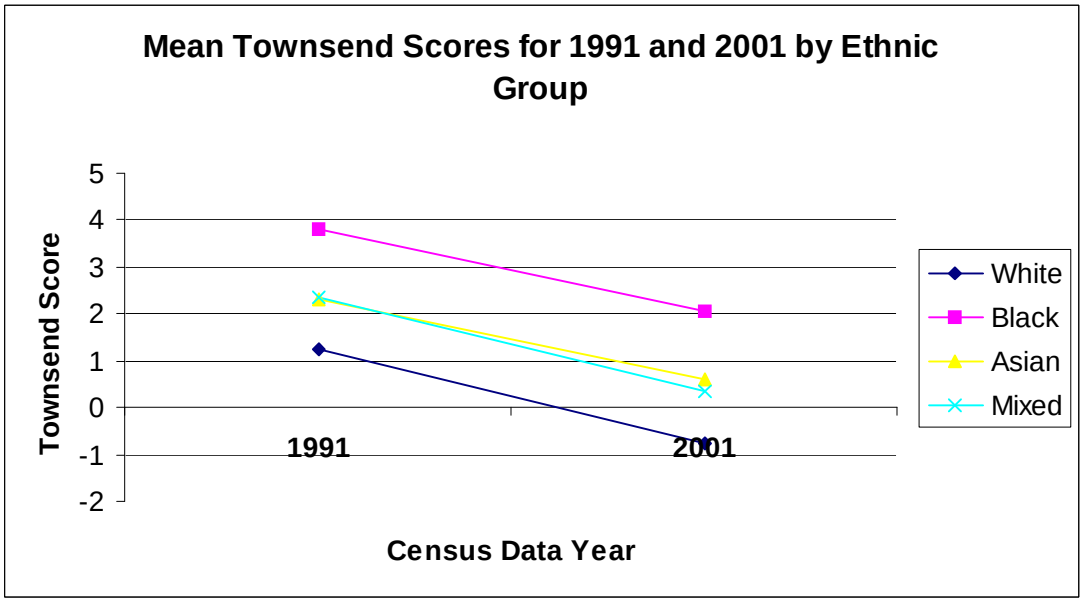
A chi square test was conducted with the degree class data (X^2=28.6, df=9, p<0.01). There were several cells that had expected frequencies of less than 5 rendering the final chi square invalid, but there is still some indication that there are differences in the observed rates. Thus to explore this further the data were split into two by two tables comparing Black and All except Black for each degree classification and for postgraduate masters and PhD qualifications. Fisher exact tests were carried out on these tables. The Black group had a significantly higher number of PhD's (z=2.69, p<0.01), a significantly lower number of 1st's (z=-2.47, p<0.05) and a significantly higher number of 2.2's (z=2.53, p<0.05). No significant differences were found for Master's, 2.1's or 3rd's. These data imply that the Black candidates had lower degree classifications than other applicants. These results should be treated cautiously because the numbers involved are so small and repeated tests have been done increasing the chance of a type 1 error.

5. Do the Black candidates live in more socio economically deprived areas than other candidates?

Postcodes for all the applicants from the 2006 cohort were collected. These then had to be converted to Townsend scores of deprivation. Figure 5. shows the

mean Townsend scores for each of the ethnic groups. In figure 5 a general trend for the socioeconomic deprivation to decrease between 1991 and 2001 can be seen. At the same time each of the groups remains in a similar position relative to the others. A one factor independent measures ANOVA was carried out on the 1991 data. This revealed a statistical difference between the groups (F=13. 39, p<0.01). Scheffe post hoc analysis revealed significant differences between the Black and White groups (P<0.01) and the Asian and White groups (P<0.01). The same calculations were carried out on the 2001 data (F=20.83, P<0.01). The Sheffe post hoc analysis also returned the same results of significant differences between the Black and White

Figure 5. Mean Townsend score from 1991 and 2001 census data by ethnic group.

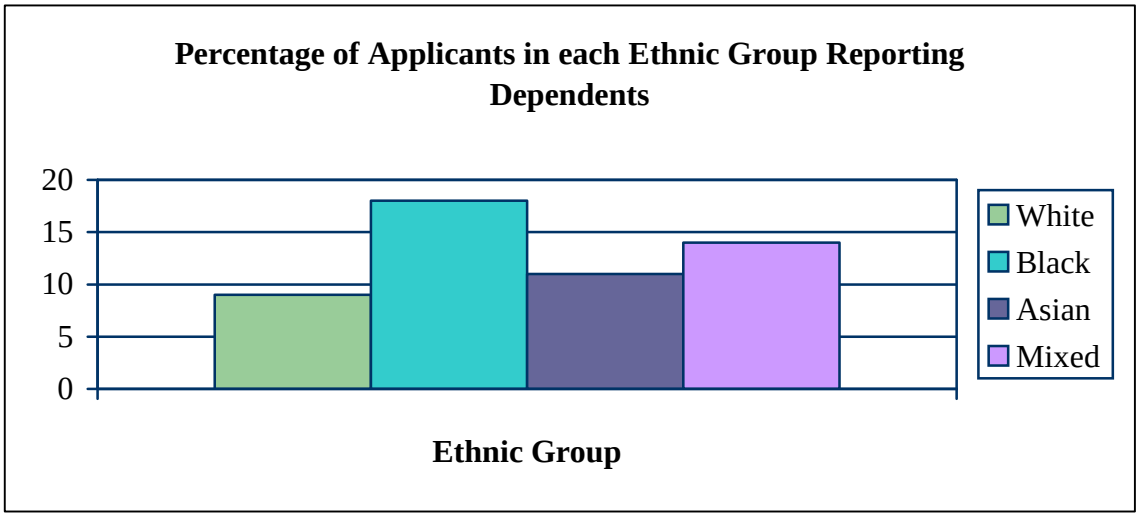


groups (P<0.01) and the Asian and White groups (P<0.01). Thus this supports the hypothesis that Black applicants are living in areas of greater socioeconomic deprivation.

6. Are Black candidates more likely to have dependants than other candidates?

Figure 6 presents the percentage of applicants declaring dependants in each ethnic group. A chi squared test was carried out to ascertain if there were significant differences in the rates of those with dependents between the ethnic groups. No significant difference was found (X^2=6.35, df=3, n.s).

Figure 6. Percentage of applicants declaring dependants in each ethnic group.



Discussion

Rate of Acceptance of Black Applicants

The answer to the initial question asking if there is a significant difference in the acceptance rate of Black applicants onto clinical training in 2006, appears to be yes. Even when taking into consideration the greater proportion of naïve applications lacking either a work permit or eligibility for the GBR made by Black candidates. Some qualification must be placed around this. The numbers within each group are markedly different with far less Black applicants than White (2126 vs. 49), making it difficult to draw firm conclusions from the data. In addition the data are from a single cohort, and with such relatively small numbers of Black applicants it could represent an anomaly peculiar to this cohort. Related to the small number of Black applicants another potential flaw in the analysis arises from the grouping together of the ethnic groups into the four larger categories. While this was the only feasible option to provide workable samples, it has to be recognised that there can be great variation within these groups. Sociological research reports that Black African students are more likely to possess higher education qualifications than Black Caribbean students (Mason, 2003). There are similar differences in the Asian group with Pakistani and Bangladeshi students less likely to attain as higher academic qualifications than students of Indian origin (Mason, 2003). Overall the data does indicate there is a

difference, but to draw firmer conclusions data from across a number of cohorts needs to be collapsed together and analysed. With a larger sample it would be possible to ascertain if this is a continued pattern. It would also be possible to explore potential differences within the Black, Asian, White and Mixed categories. These points need to be taken into consideration whilst trying to draw conclusions from the subsequent analysis of the data in this project.

Failure at Short- Listing or Interview

The reason for asking this question was to ascertain if it was the short-listing stage or the interview stage at which the Black applicants were failing. The data revealed that the application forms from Black applicants were significantly less successful at eliciting an offer of an interview. Thus there is something different about their application forms that is not allowing them to pass through the short-listing stage. An unexpected result here was the marked success that Asian applicants had at this stage. The ratio is impressive especially considering over 50% of Asian applicants were offered four interviews meaning it was not just a case of these people only applying to one course and artificially inflating the ratio. This may imply that the Asian applicants had particular difficulties at the interview stage, which would warrant further investigation if it proved to be a consistent pattern across cohorts.

Academic Attainment

In research into selection for clinical training, academic attainment is consistently revealed as an important factor (Boyle, Baker, Bennet, & Charman, 1993; Phillips, Hatton, & Gray, 2004; Scior, Gray, Halsey, & Roth, 2007). The results of this project indicated that the Black applicants were applying with poorer academic records than other candidates. The sampling of the application forms revealed significantly lower A- Level points and a greater likelihood of having attended a less prestigious new university. Before drawing conclusions from these figures it is important to note that applicants in the Asian category also applied with lower A Level points than White candidates and were also more likely to have attended a new university. As was discussed above, the Asian applicants did very well at the short-listing stage. This implies that A- Level points and type of higher education institution, either do not have a direct influence on the chance of selection, or that the Asian applicants were able to compensate for this in some way, for example through

clinical and research experience. Further investigation into this issue with a larger data set would be needed to elucidate a more conclusive answer.

The results of the investigation into degree class and post graduate qualifications also give support to the hypothesis that the Black applicants lower rate of acceptance was related to a poorer academic record. The results indicate that the Black applicants were less likely to have 1st, more likely to have a 2.2 and also more likely to have a PhD. The higher rate of 2.2's would have prejudiced their chances of successful application, as most courses stipulate candidates should have a 2.1 or higher. There was a higher rate of PhDs and this may be because Black candidates were using these to supplement weaker undergraduate qualifications. It might be expected the rate of Masters would also be raised if this was the case but this was not found. The small numbers of Black applicants become even smaller when split between the different degree classification groups. For example there were only 3 Black applicants with a PhD, and while the Fisher exact test is designed for small samples (Leach, 1979) it would be premature to place much weight on this result. Further investigation with data from several years providing larger samples is needed before any definitive hypotheses and conclusions can be drawn.

Socio-economic Deprivation

Ethnicity is not the only nor always the main differentiator in terms of disadvantage, for example gender, class and socio-economic status are all major factors in the disadvantage experienced by people (Mason, 2003). The results indicated that Black applicants were more likely to come from areas that experienced greater levels of socio-economic deprivation, using data from both the 1991 and 2001 census. It could be proffered that this information gives weight to the idea of a cycle of deprivation. Growing up in a more disadvantaged area puts creates more obstacles to doing well at school (lower A- Level results), this in turn would limit the candidates choice of university and potentially negatively influence their degree results, once at university (Broecke & Nicholls, 2007; Connor, Tyers, Davis, & Tackey, 2003). The relationship between successful applications and socio-economic deprivation have been seen in other professions such as medicine (Coker, 2001). With socio-economic status closely related to academic attainment, a further regression analysis across several cohorts needs to be conducted to ascertain if ethnicity still affects rate of acceptance, once socio-economic status has been controlled for.

Dependants

The study conducted on trainees applying to UCL (Scior, Gray, Halsey, & Roth, 2007) noted that applicants from BME backgrounds were more than twice as likely to have dependants. This finding was not replicated in this sample.

Other Factors

There are a number of other factors relevant in the selection processes that have been outside the scope of this project. Two important factors associated with successful applications (Phillips, Hatton, & Gray, 2004) were not examined due to the time constraints on this project. The first is the amount and variety of relevant clinical experience. Are Black candidates able to gain the same experience as other groups? Some research concerning post-graduate social work training indicated that Black candidates struggled to get onto courses because their experience had not been sufficiently grounded in mainstream social work (Arora, 2005). The other major area that has not yet been examined, are the open-ended questions on the form. Is there a difference in the way this has been filled in between different groups. A qualitative analysis of these answers would provide a useful source of information.

Conclusions

The data from the 2006 cohort suggest that applications from Black candidates are less likely to succeed. A number of differences have been highlighted in these applications, but a larger study across cohorts is needed to draw firmer conclusions and untangle the influence of socio-economic deprivation. Researchers have stated that as the factors associated with selection are a general set of indicators for the competencies required for clinical training this implies that those short-listing were abiding by short-listing pro-forma rather than applying directly discriminatory criteria (Phillips, Hatton, & Gray, 2004). This does not mean that there is not indirect discrimination in the system. For example by relying heavily on educational attainments to select, it biases those who may not have been fortunate enough to attend good schools and consequently were more limited in their choice of University. An undisputed factor in the lack of diversity in the profession is number of people from ethnic minority backgrounds applying. The Training Strategy Group of the DCP examined UCAS data, and found that about 10% of applications onto undergraduate psychology courses were made by people from ethnic minorities. This figure was found to be similar to other social science subjects such as sociology but far lower than professions such as law, with about 24% of successful applicants are from ethnic minorities (BPS, 2001, cited in Turpin & Fensom, 2004). This implies clinical psychology is less known, or less attractive as a career, either due to pay, status or perceived applicability to minority groups. A method of addressing this would be to promote the profession to undergraduates, especially targeting those institutions where there are a large number of ethnic minority students (Turpin & Fensom, 2004).

Dissemination of Results

The findings of this project were presented to the Clearing House Committee on 8/10/07 and presented at the SEP conference on 19/10/07. A poster of the project has also been given to the Group of Trainers in Clinical Psychology (GTiCP).

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Appendix

Appendix 1. Original Ethnic Categories and Groupings Used for Analysis with Number of Applicants in Each Group.