

The Prevalence of and Motivation for Drug and Alcohol Use among Black African Minorities in England

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Abstract

The current study examined the prevalence of and motivation for drug and alcohol use among black African minorities in England. Participants, comprising 82 males (i.e., 71.9%) and 32 females (i.e., 28.1%), aged 18 to 60 years, were recruited through contact on the streets, and from recreation centres, bus stations, train stations, and shopping centres in Liverpool, Manchester, and London. A self-report anonymous questionnaire covering drug and alcohol use and measures of impulsivity (i.e., sensation seeking, lack of premeditation, lack of perseverance and urgency) was administered. Although the results suggest a low level of illicit drug use, a significant number of the participants admitted to alcohol use. While predicting the motivation for alcohol use via the Whiteside and Lynam (2001) measures of impulsivity, a lack of premeditation was significantly attributed to motivation for alcohol use among the participants. Other impulsivity measures, such as sensation seeking, urgency, and lack of perseverance, do not appear to be significant predictors of alcohol use, but there were significant relationships between urgency, lack of premeditation and patterns of alcohol use. The implications of the findings in terms of policy formulation on drug treatment services are emphasised.

Key Words – Ethnic minorities, black African minorities, drug and alcohol use, impulsivity

Background

Britain has had a long history of immigration, with considerable inflows of migrants from different parts of the world (Stillwell & Williams, 2005). Of all these immigrants, the proportion of black African minorities is steadily increasing, with a gain of 53 percent between the 1981 and 1991 census period and 141 per cent during the 1991 to 2001 census period (Rees & Butt, 2003). The rapid growth in the black African

population, particularly from Nigeria, Ghana, Somalia, Angola and Congo, has been attributed to consistent immigration flow into Britain and high fertility rate, further enhanced by a considerable number of youths among the group (McCarthy, 2003). The vast majority of black and minority ethnic groups in England are heavily concentrated in certain London boroughs and metropolitan districts (Office of National Statistics, 2001) or the most deprived inner-city areas (Social Exclusion Unit, 1998), and the relative economic deprivation of these neighbourhoods has been associated with increasing risks of drug and alcohol mis-use (Harrison, Sutton, & Gardner, 1997; Haw, 1985; Pearson, 1987; Rasool, 2006; Patel & Wibberley, 2002). Sangster, Shiner, Sheikh and Patel (2002) also observed that the levels of drug and alcohol use among black minority groups is steadily increasing but lower than the indigenous white population. The differences in patterns of drug and alcohol use between ethnic minorities and indigenous white population notwithstanding, there is evidence to suggest that a wide range of black and minority ethnic groups are involved in illegal drug use (Rasool, 2006; Sangster et al., 2002).

A number of risk factors have been implicated in the aetiology of substance abuse behaviour among different groups. These factors can be classified into intra-personal risk factors (e.g., personality traits of impulsivity, negative affectivity, cognitive disability), or extra personal risk factors (e.g., peer pressure, neighbourhood disorganisation, lack of parental monitoring, etc) which are external to the individual (Sussman & Ames, 2001). Of these factors, the current study focuses on intra-personal factors of impulsivity to explain motivation for drug and alcohol use among black African minorities in England. The current researcher is particularly interested in impulsivity because there are robust findings linking impulsive temperament with substance misuse and other problem behaviour (Allen, Moeller, Rhoades, & Cherek, 1998; Dawe, Loxton, et al., 2007; Evenden, 1999). Indeed, research on impulsivity and addiction finds that impulsivity plays a significant role in explaining the lack of behavioural inhibition in drug abusers (for reviews, see Allen, Moeller, Rhoades, & Cherek, 1998; Evenden, 1999; Bickel & Marsch, 2001; Moeller & Dougherty, 2002; Hayaki, Stein, Lessor, Herman, & Anderson, 2005).

The definition of impulsivity varies among investigators, but most have similar components. Impulsivity is defined as a predisposition toward rapid, unplanned reactions to internal or external stimuli without regard to the negative consequences of the actions on the impulsive individual or on others (Moeller, Barratt, Dougherty, Schmitz, & Swann 2001). Petry (2001) suggested that impulsivity includes an orientation towards a diminished ability to delay gratification, behavioural disinhibition, risk taking, sensation seeking, boredom proneness, reward sensitivity, and poor planning, all of which often leads to undesirable consequences.

Impulsivity model posits that it is the inability of an individual to process and analyse the immediate action properly that may prompt such an individual to engage in antisocial behaviour. This therefore explains why impulsivity has been used to explain motivation for substance misuse behaviour because of the inability of some addicts to weigh the consequences of their immediate actions (Kirby, 1997; Madden, Petry, Badger, & Bickel, 1997; Petry, Bickel, & Arnett, 1998; Kirby et al., 1999; Kollins, 2003; Petry, 2003; Kirby & Petry, 2004).

However, it should be noted that impulsive personality trait associated with substance misuse and other forms of antisocial behaviour include not only rash impulsiveness, but also several other personal dispositions. These include lack of premeditation, urgency, sensation seeking and lack of perseverance (Whiteside & Lynam, 2001). Pre-meditation as a construct of impulsivity describes the ability to think and reflect on the consequences of an act before engaging in that act. Conversely, a lack of pre-meditation suggests insufficient ability or complete inability to plan out actions and anticipate consequences or deficits in executive functioning (Whiteside & Lynam, 2001). An individual suffering from lack of pre-meditation tends to act on the spur of the moment without regard to the consequences of the immediate action that describes the most frequently cited risk factors for substance misuse behaviour. Low scorers in (lack of) premeditation scale are thoughtful and deliberative, whereas high scorers act on the spur of the moment and without regard to the consequences.

The urgency sub trait of impulsivity refers to the tendency to experience strong impulses, frequently under conditions of negative affect. High scorers on urgency are likely to engage in impulsive behaviours in order to alleviate negative emotions despite the long-term harmful consequences of these actions. The items that contribute to urgency and the fact that urgency is aligned with neuroticism suggest that the impulsive actions associated with this personality trait are coloured and influenced by strong impulses and emotions (Whiteside & Lynam, 2001).

Lack of perseverance refers to an individual's inability to remain focused on a task that may be boring or difficult. Individuals low in (lack of) perseverance are able to complete projects and to work under conditions that require resistance to distracting stimuli. Lack of perseverance may be related to disorders that involve the inability to ignore distracting stimuli or to remain focused on a particular task, such as attention deficit/hyperactivity disorder (ADHD). Sensation seeking on the other hand describes a tendency to enjoy and pursue activities that are exciting and openness to trying new experiences that may or may not be dangerous. Sensation seeking includes risk-taking, which typically satisfies the high sensation seeking individual's

desire for novel and intense experiences (Myerson & Green, 1995). For example, a high sensation seeker might choose to use alcohol or marijuana despite possible addiction, overdose, and legal, social, and school-related problems. High scorers in sensation seeking scale enjoy taking risks and engaging in dangerous activities, whereas low scorers avoid risk and danger.

Given this background, the overall aim of the current study was to determine the prevalence of and motivation for drug and alcohol use among black African minorities in England in order to establish the patterns of drug and alcohol use among the group, and thereby come up with suggestions on policy formulation that may benefit minority ethnic groups residing in England. To achieve this, the following research questions were addressed:

- ❖ What is the pattern of drug and alcohol use among black African minorities?
- ❖ Is there any significant difference between the patterns of alcohol and drug use across various demographic characteristics (e.g., duration of staying in England, marital status, and age group)?
- ❖ What is the relationship between substance abuse and levels of impulsivity among the participants?
- ❖ To what extent do personality traits of impulsivity predict the involvement of the participants in drug and alcohol use?

Methods

Ethical Procedures and Sampling

After a favourable ethical opinion to conduct the present study was obtained from the University of Surrey Ethics and Quality Committee, the researcher recruited participants, i.e., male and female adults within the ages of 18 to 60 years through personal contacts on the streets and in the recreation centres, bus stations, train stations, football pitch, and shopping centres in Liverpool, Manchester, and London. While the researcher was distributing the questionnaires, the participants were informed that their participation was voluntary and anonymous. To further ensure their anonymity, the participants were told not to put their names or any of the pages of the questionnaire or put any marks that might identify them. The researcher emphasised that the return of a completed questionnaire constituted informed consent to participate in the study. Out of 375 questionnaires that were distributed during this study, 114 (i.e., 30.4%) were returned via self addressed prepaid envelopes. However, it should be noted that there was a section of the questionnaire that requires the participants to state their country of origin in order to

ensure that the target group (i.e., Black African minorities) were recruited for the study.

Questionnaire:

A self-report, anonymous questionnaire was used to generate responses from the participants. The questionnaire contained four parts:

- Section A focused on the demographic variables of the participants where they were asked to report to provide the requested information on their demographic characteristics by stating their exact age, occupation, gender, country of origin, and duration of residency in the United Kingdom.
- Section B consisted of a 45-item, self-rated UPPS personality scale that was developed by Whiteside and Lynam in 2001. The author of the current study was interested in this scale because the scale presents a new perspective which regards impulsivity as an artificial umbrella term that actually encompasses four distinct facets of personality associated with impulsive behaviour. The four distinct facets incorporated in the instrument focuses on the dimensions of urgency (12 items), lack of premeditation (11 items), lack of perseverance (10 items), and sensation seeking (12 items). Each item is rated on a 0 = not at all to 4 = very much – point scale. Individuals high on impulsivity are characterized by low urgency, high sensation seeking, low perseverance and low premeditation scores. The subscales UPPS scale has sound internal consistencies in the original study (a ranged from .82 to .91) (Whiteside & Lynam, 2001). The coefficient reliability of the UPPS scales used in the present study is reported in Table 1.
- Section C contains screening measures to determine the prevalence of drug and alcohol use. In this section, the respondents were requested to report incidents of the drugs and alcohol that they have used in the past. Also, items regarding the estimates of joints smoked and units of alcohol used in the past week were included. A unit of alcohol is equivalent to half a pint, a measure of spirits, or a glass of wine.

Table 1: Coefficient reliability of the scale used for the present study data collection

Scales	Cronbach alpha	Item Mean	Minimum	Maximum
Lack of premeditation	.822	2.84	2.16	3.15
Sensation Seeking	.833	2.56	2.00	3.05
Lack of perseverance	.732	1.81	1.59	2.55
Urgency	.837	1.66	1.47	2.64

Analytic Strategies

Statistical Package for Social Sciences (SPSS) was used for data analysis. A combination of univariate (frequency counts), bivariate (chi square statistics) and multivariate (logistic regression) analyses were conducted to determine the prevalence of, and motivation for, alcohol and drug use among the participants.

Results

Sample Description: The summary data of demographic characteristics of the participants are shown in Table 2.

Table 2: Sample Characteristics (N=114)

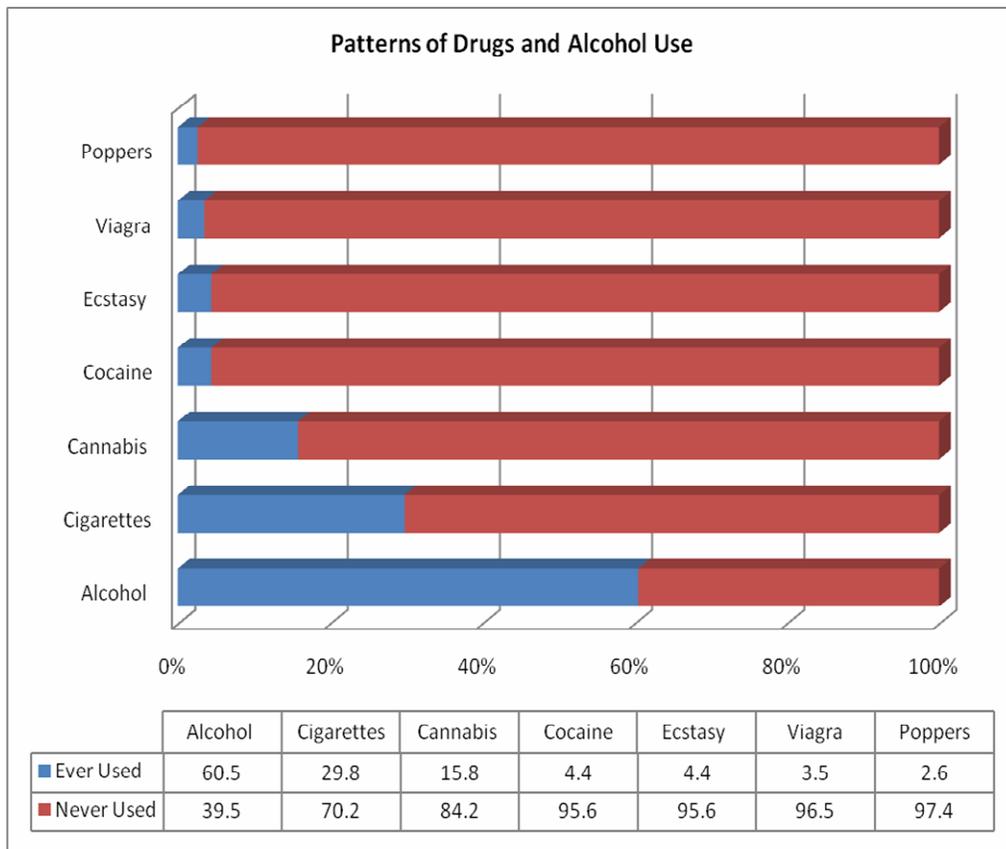
Characteristics	Frequency	Percentage
Gender		
Male	82	71.9
Female	32	28.1
Marital Status		
Married	43	37.7
Single	69	60.5
Divorce	02	1.8
Age Group		
18-20	17	14.9
21-30	48	42.1
31-40	32	28.1
41-50	13	11.4
51-60	04	3.5
Education		
Masters	31	27.2
Degree	38	33.3
HND	04	3.5
OND	01	0.9
College	02	1.8
Diploma	12	10.5
A Level	22	19.3
High School	03	2.6
Primary	01	0.9
Country of Origin		
Nigeria	66	57.9
Others	48	43.1
Duration of residency in the UK		
0-3 years	49	43.0

4-6 years	26	22.8
7-9 years	09	7.9
More than 10 years	30	26.3
Occupation		
Security	08	7.0
Student	51	44.7
Support Work	06	5.3
Engineering	06	5.3
Customer Care	12	1.5
Others	31	27.2

Note: Other countries of origin include Ghana, DR Congo, Uganda, Zimbabwe, Kenya, and South Africa

Self-report drug use: The most prevalent ever used drug/substance among the participants was alcohol (60.5%). This was followed by cigarettes (29.8%) and cannabis (15.8 %). There was similar pattern for alcohol and cigarettes used during the last week with alcohol topping the list of most consumable drug. There was generally low level of drugs and alcohol used with only few numbers admitted taking drugs in the past. Additional information on patterns of drugs and alcohol use are summarised in Figure 1 below.

Figure 1: Self report incidents of Alcohol and Drugs Use



Combined Analysis

Chi square analysis was employed to predict patterns of relationship between units of alcohol used across various demographic factors of the participants (e.g., gender, age group, duration of staying in the United Kingdom, and marital status (see tables 4-7). Pearson correlation was further used to determine patterns of relationships between impulsivity measures and units of alcohol used.

Table 4: Patterns of relationship between units of alcohol used per week and age group

Age Group	Alcohol Used		Chi square	df	p
	Never Used	Ever Used			
18-20 years	06	11	2.0	2	0.364 ^{ns}
21-30 years	16	32			
31-60 years	23	26			

Note: ns= not significant

The computed outcomes from the chi square statistics suggest that there was no statistically significant relationship between units alcohol used per week and age group of the participants. However, it should be noted that the expected frequency for ages 41-60 among the participants who has never used alcohol is less than 5. This explains why the ages 31-60 was grouped to make it appropriate for chi square tests.

Table 5: Patterns of relationship between units of alcohol used per week and gender

Gender	Alcohol Used		Chi square	df	p
	Never Used	Ever Used			
Male	31	51	0.34	1	0.559 ^{ns}
Female	14	18			

Similarly, there was no statistically significant relationship between units alcohol used per week and gender of the participants.

Table 6: Patterns of relationship between units of alcohol used and duration of stay in England

Duration of Staying in the UK	Alcohol Used		Chi square	df	p
	Never Used	Ever Used			
0-3years	24	25	5.7	3	0.126 ^{ns}
4-6years	08	18			
7-9years	05	04			
More than 10 years	08	22			

Note: ns= not significant

There was also no significant relationship between units of alcohol used and duration of staying in the United Kingdom among the participants.

Table 7: Patterns of relationship between units of alcohol used and marital status

Marital Status	Alcohol Used		Chi square	df	p
	Never Used	Ever Used			
Married	17	26	0.012	2	0.913 ^{ns}
Single	28	41			

Note: ns= not significant

Finally, there was no significant relationship between units of alcohol used and marital status of the participants.

Relationships between Impulsivity measures and Units of Alcohol Used

Pearson correlation analyses suggest significant relationships between lack of premeditation and units of alcohol use ($r=.237$, $p < 0.05$) whereby lower premeditation scores were associated with higher units of alcohol consumed by the participants per week. Similar significant relationships were found between urgency and units of alcohol used ($r=.193$, $p < 0.05$) which suggest that lower urgency is associated with high level of alcohol use by the participants. Conversely, there were no significant relationships between sensation seeking and units of alcohol used ($r=-.166$, $p=0.141$), lack of perseverance and units of alcohol used ($r=.121$, $p=0.307$).

Logistic Regression Analyses

Where units of alcohol use in a week was the dependent variable, the regression model (adjusted $R^2 = 0.461$, $F_{4, 22} = 4.305$, $p < 0.05$) was predicted by lack of premeditation ($t = 2.090$, $p < 0.039$, $\beta = 0.195$) which indicates that the participants who scored low on lack of premeditation scale were significantly more likely to consume more alcohol per week. Urgency ($t = 1.238$, $p < 0.218$, $\beta = 0.129$), sensation seeking ($t = -1.262$, $p < 0.210$, $\beta = -0.117$) and lack of perseverance ($t = 0.266$, $p < 0.791$, $\beta = 0.027$) were not significant predictor of patterns of alcohol use by the participants.

Discussion

The present study examined the patterns of and motivation for drugs and alcohol use among black African minorities in England. The findings indicate low rates of illicit drug use, such as cocaine, ecstasy, and heroin (see figure 1), but a majority of the

respondents (i.e., 60.5%) admitted to consuming alcohol. This was followed by cigarette use (29.8%) and cannabis use (15.8 %). However, the low level of rates of alcohol consumption does not necessarily imply that survey participants do not consume drugs and alcohol. As drug use is heavily stigmatised among members of African communities, the admittance of such behaviour might be seen as a source of shame. Respondents may also feel reluctant to disclose their true use of illicit drugs because of their fear of legal repercussions. Another possible explanation for the relatively low level of drug and alcohol reported use among the black African population may be connected to the expectations of their family and acquaintances back home. The expectations of migrants' family, friends, and associates in their countries of origin are high, and a choice to turn to criminal activity would be deemed disgraceful.

The majority of the participants who did admit to consuming alcohol and those few admitted to other types of drugs in the recent past were males who fell within the age group of 21 to 30 years. Although age group of the participants was not found to be statistically significant, this observation on male domination of the alcohol use corresponds with findings of research regarding alcohol related problems in Nigeria, and elsewhere in Africa which revealed that males who are adolescents or more youthful in terms of age are more likely to show drug and alcohol related problems than their female counterparts (Gureje, Obikoya, & Ikuesan, 1992; Obot, 1990; Gureje et al., 2007; Flisher et al., 2003; Odejide, Ohaeri, Adelekan & Ikuesan, 1987).

It should be highlighted that the present study was designed to predict motivation for illicit drug and alcohol use, but this proved difficult because the overwhelming majority of the respondents did not report illicit drug use, hence the study is restricted to predicting motivating factors for alcohol use instead. Results of the analysis on this suggest that lack of premeditation is the only predictor of alcohol use among the participants. A lack of pre-meditation as predicted in the current study suggests insufficient ability or complete inability to plan out actions and anticipate consequences or deficits in executive functioning (Whiteside & Lynam, 2001). In this context, drug and alcohol users tend to act on the spur of the moment without regard to the consequences of the immediate action that describes the most frequently cited risk factors for substance misuse behaviour (Bickel & Marsch, 2001; Kirby, Petry, & Bickel, 1999; Moeller, Barratt, Dougherty, Schmitz, & Swann 2001).

Meanwhile, it seems appropriate to acknowledge the fact that the present study suffers from some attendant limitations that must be acknowledged and addressed in future work. Firstly, the sample size for the participants was relatively small (N=114), compared to the large numbers of black African minorities residing in England. Also,

most of the participants selected for the present study were male. Although it is possible that male participants can be more easily approached because the researcher who distributed the questionnaire was of the same sex, the domination of the male sample may limit the extent to which we can make an inference about patterns of drug and alcohol use among female black African minorities. It would therefore be better if the future studies recruited a larger sample with an adequate number of female participants in order for such findings to be replicated to other settings.

The uncorroborated self report method of data collection and the extent to which the respondents underreported or over reported their involvement in various activities and behaviours may as well not be truly determined. Although the researcher assured confidentiality of the participants' response, the research topic is sensitive and the admissions of the participants to substance misuse are potentially compromising. In this sense, social desirability factors cannot be ruled out, as participants may want to conceal certain information in order to prevent themselves from being implicated.

All of the appropriate caveats notwithstanding, the findings of the current study have contributed to research knowledge that will be relevant to researchers, practitioners, and policy makers to have a basic knowledge on the patterns of alcohol and drug use among the black African minorities residing in England and, through this, develop strategies for preventing or minimising drug and alcohol problem associated with this particular group.

Concluding thoughts

Although the current study did not establish patterns of illicit drug use among the group, this does not justify the neglect of the needs of ethnic minorities in terms of policy formulation on drug treatment services. It should be recognised that black and minority ethnic groups in the United Kingdom constitute a heterogeneous group with varying values, attitudes, religious beliefs, and customs that may affect their ways of life and possible patterns of substance abuse. This cultural diversity among the group is further enhanced by various risk factors that may precipitate members of the group to engage in substance misuse behaviour. For instance, Rasool (2006) reported that members of the group were over-represented among the lower social classes, with higher unemployment rates, impoverished living conditions, poorer housing, and low employment status, all of which may constitute risk factors for substance misuse behaviour among the group. It will therefore not be appropriate

for the government to wait until the drug problem among ethnic minorities escalates before implementing a preventive or mediation service. Preventive services in the forms of orientation or sensitisation programmes on the effects of drug and alcohol use that will focus on minority groups may need to be put in place. This will go a long way in reducing the number of individuals among the group who are more likely to engage in substance misuse, and consequently will reduce government expenditure in terms of drug treatment services for minority ethnic groups.

References

Allen, T.J., Moeller, F.G., Rhoades H.M., & Cherek, D.R. (1998). Impulsivity and history of drug dependence. *Drug Alcohol Dependence*, 50, 137–145.

Dawe, S., Loxton, N.J., Gullo, M.J., Staiger, P.K., Kambouropoulos, N., Perdon, L., & Wood, A. (2007). The role of impulsive personality traits in the initiation, development, and treatment of substance misuse problem. In P.M. Miller and D.J. Kavanagh, *Translation of Addictions science into Practice*, Elsevier, London. pages 321-340.

Evenden, J.L. (1999). Varieties of impulsivity. *Psychopharmacology*, 146, 348–361.

Flisher, A.J., Parry, C.D.H., Evans, J., Muller, M., & Lombard, C. (2003). Substance use by adolescents in Cape Town: prevalence and correlates. *Journal of Adolescent Health*, 32, 58–65.

Gureje, O., Degenhardt, L., Olley, B., Uwakwe, R., Udofia, O., Wakil, A., Adeyemi, O., Bohnert, K.M., & Anthony, J.C. (2007). A descriptive epidemiology of substance use and substance use disorders in Nigeria during the Early 21st Century. *Drug and Alcohol Dependence*, 91, 1-9.

Gureje, O., Obikoya, B., & Ikuesan, B.A. (1992). Alcohol abuse and dependence in an urban primary care clinic in Nigeria. *Drug and Alcohol Dependence*, 30(2), 163-167.

Harrison, L., Sutton, M., & Gardiner, E. (1997). Ethnic differences in substance use and alcohol use-related mortality among first generation migrants to England and Wales. *Substance Use and Misuse*, 32 (8), 849-876.

Haw, S. (1985). *Drug problems in Greater Glasgow*. London: Standing Committee on Drug Abuse (SCODA).

Hayaki, J., Stein, M.D., Lessor, J.A., Herman, D.S., & Anderson, B.J. (2005). Adversity among drug users: relationship to impulsivity. *Drug and Alcohol Dependence*, 78(1), 65-71.

Kirby, K. N. (1997). Bidding on the future: evidence against normative discounting of delayed rewards. *Journal of Experimental Psychology: General*, 126, 54-70.

Kirby, K. N., & Petry, N. M. (2004). Heroin addicts have higher discount rates for delayed rewards than alcoholics or non-drug-using controls. *Addiction*, 99 (4), 461-474.

Kirby, K. N., Petry, N. M., & Bickel, W. K. (1999). Heroin addicts have higher discount rates for delayed rewards than non-drug-using controls. *Journal of Experimental Psychology: General*, 128, 78-87.

Kollins, S.H. (2003). Delay discounting is associated with substance use in college students. *Addictive Behaviours*, 28 (6), 1167-1173.

Madden, G.J., Petry, N.M., Badger, G. J., & Bickel, W.K. (1997). Impulsive and self-control choices in opioid-dependent patients and non-drug-using control participants: drug and monetary rewards. *Experimental Clinical Psychopharmacology*, 5, 256-263.

McCarthy, M. (2003). *40% Increase in England's Black Population Since 1991*. The Independent UK, September 4, 2003.

Moeller, F.G., & Dougherty, D.M. (2002). Impulsivity and substance abuse: What is the connection? *Addictive disorder their treatment*, 1, 3-10.

Moeller, F.G., Barratt, E.S., Dougherty, D.M., Schmitz, J.M., Swann, A.C. & Grabowski, J. (2001). Psychiatric aspects of impulsivity. *American Journal of Psychiatry*, 158, 1783-1793.

Myerson, J., & Green, L. (1995). Discounting of delayed rewards: models of individual choice. *Journal of the Experimental Analysis of Behaviour*, 64, 263-276.

Obot, I. (1990). Substance abuse, health and social welfare in Africa: an analysis of the Nigerian experience. *Social Science and Medicine*, 3, (6), 699-704.

Odejide, A.O., Ohaeri, J.U., Adelekan, M., & Ikuesan, B.A. (1987). Drinking behavior and social change among youths in Nigeria: a study of two cities. *Drug and Alcohol Dependence*, 20, 227-233.

Office of National Statistics (2001). *Living in Britain- results from the 1998 general household survey*. The Stationery Office, London.

Patel, K., & Wibberley, C. (2002). Young Asians and drug use. *Journal of Child Health Care*, 5(1), 53-61.

Pearson, G. (1987). *The New Heroin Users*. Oxford: Blackwell.

Petry, N.M. (2001). Pathological gamblers, with and without substance use disorders, discount delayed rewards at high rates. *Journal of Abnormal Psychology*, 110, 482–487.

Petry, N.M. (2003). Discounting of money, health, and freedom in substance abusers and controls. *Drug and Alcohol Dependence*, 71 (2), 133-141.

Petry, N. M., Bickel, W. K., & Arnett, M. (1998). Shortened time horizons and decreased sensitivity to future consequences in opioid-dependent individuals. *Addiction*, 93, 729-738.

Rasool, G.H. (2006). Substance abuse in black and minority ethnic communities in the United Kingdom: a neglected problem? *Journal of Addiction Nursing*, 17(2), 127 – 132.

Rees, P., & Butt, F. (2003). *Ethnic change and diversity in England, 1981-2001*, Paper Presented at the RGS-IBG Annual Conference, London, September.

Sangster, D., Shiner, M., Sheikh, N., & Patel, K. (2002). *Delivering drug services to black and minority ethnic communities*, DPAS/P16. Home Office Drug Prevention and Advisory Service (DPAS), London.

Social Exclusion Unit (1998). *Bringing Britain together: A National Strategy for Neighbourhood Renewal*. London: Stationery Office.

Stillwell, J., & Williams, D. O. (2005). *Ethnic population distribution, immigration and internal migration in Britain: what evidence of linkage at the district scale?* Paper presented at the Annual Conference of the British Society for Population Studies at the University of Kent, Canterbury, September.

Sussman, S., & Ames, S.L. (2001). *The social psychology of drug abuse*. Buckingham: Open University.

Whiteside, S. P. & Lynam, D.R. (2001). The five factor model and impulsivity: using a structural model of personality to understand impulsivity. *Personality and Individual Differences*, 30 (4), 669-689.

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