

**Ethnicity, Neighbourhood Deprivation and Quality of Life:
An exploratory analysis of Annual Population Survey data**

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Ethnicity, Neighbourhood Deprivation and Quality of Life

An exploratory analysis of Annual Population Survey data



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Labour Force Survey/Annual Population Survey User
Conference 2014, UK Data Service: London.

28th November, 2014

Overview

- ***Background***
- ***ONS efforts on wellbeing measurement***
- ***Wellbeing status***
- ***Why this topic?***
- ***Differentials in wellbeing by ethnic groups***
- ***Differentials in wellbeing by deprivation & geography***
- ***Determinants of wellbeing***
- ***International comparison***
- ***Research Issues***

Societal Happiness

- The importance of happiness in society is acknowledged at least as far back as the ancient Greek philosophers e.g. Aristotle
- Conception of the good life for humans is one in which they function well; this involves attaining moral and intellectual virtues (Allmark 2005).
- Gross Domestic Product (GDP) has been generally accepted as a measure of national economic prosperity BUT lead to widespread social inequalities
- New concept of SWB emerged over the last four decades as an alternative measure of social welfare to GDP in informing public policy decisions (Layard 2005).

Theoretical approaches to measure wellbeing

- Measurement of SWB and happiness has its origin in psychology but has spread into the realms of economic decision theory and behavioural economics (Layard 2005; Dolan 2011; OECD 2013).
- According to various experts the happiness derived from positive psychology has been described as equivalent to life satisfaction, quality of people's lives (Helliwell, Layard and Sachs 2012) or experienced utility in microeconomics terms (Dolan 2009); whereas SWB connotes more how we feel (affective happiness) and think about life (evaluative happiness).

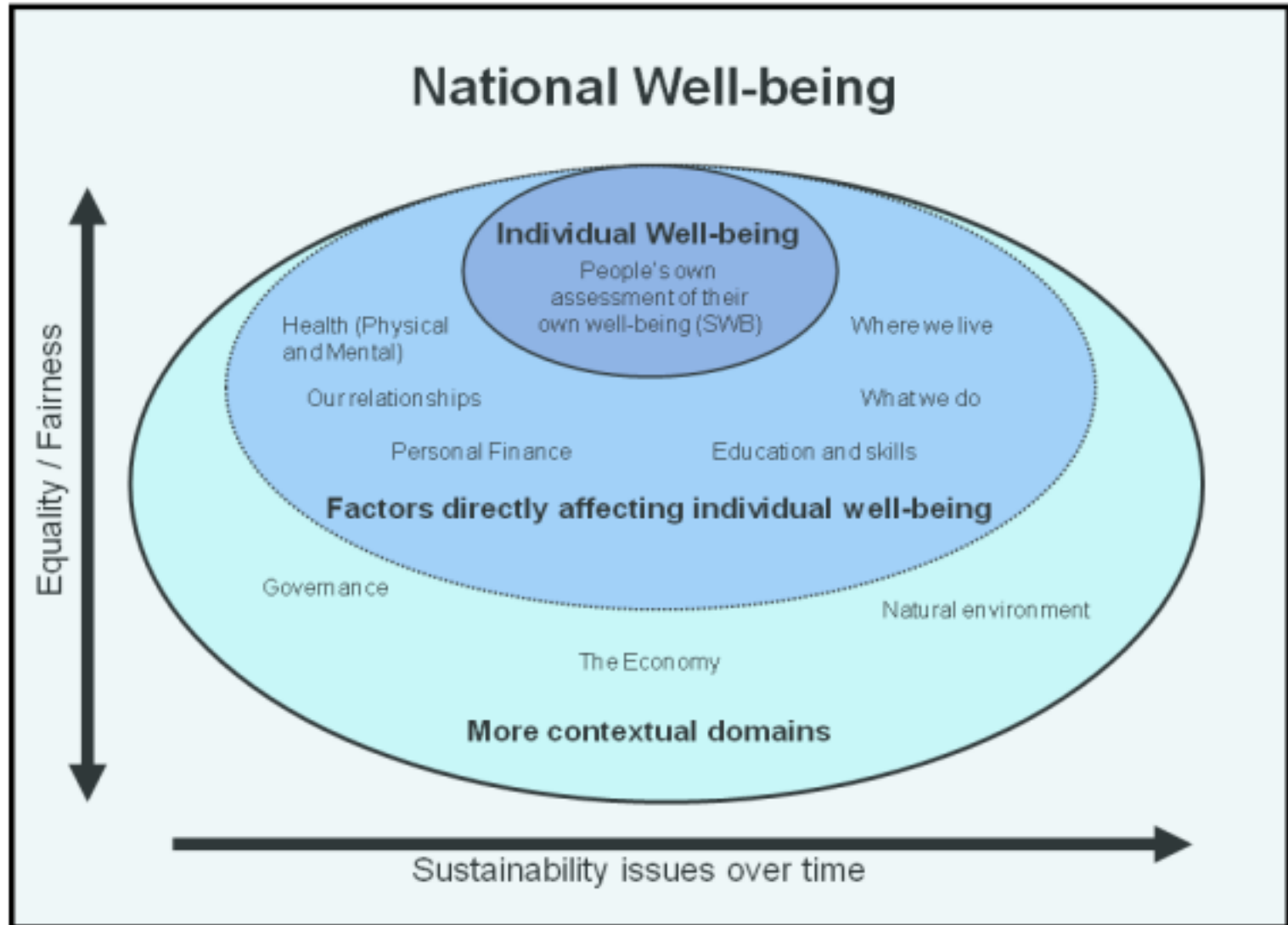
Approaches acknowledged by ONS to measure wellbeing

- Evaluative approach asks individuals to step back and reflect on their life and make a cognitive assessment of how their life is going overall, or on certain aspects of their life.
- Eudemonic approach refers to as the psychological or functioning/flourishing approach, which draws on self-determination theory and tends to measure such things as people's sense of meaning and purpose in life, connections with family and friends, a sense of control and whether they feel part of something bigger than themselves.
- Experience approach seeks to measure people's positive and negative experiences over a short timeframe to capture people's wellbeing on a day-to-day basis.

ONS Subjective wellbeing questions

- *Overall, how satisfied are you with your life nowadays? (Evaluative)*
- *Overall, to what extent do you feel the things you do in your life are worthwhile? (Eudemonic)*
- *Overall, how happy did you feel yesterday? (Experience)*
- *Overall, how anxious did you feel yesterday? (Experience)*

ONS Framework for Measuring National Wellbeing



National Wellbeing Domains

- ***Individual wellbeing (4)***
- ***Our relationships (3)***
- ***Health (5)***
- ***What we do (5)***
- ***Where we live (4)***
- ***Personal finance (4)***
- ***Education and skills (3)***
- ***The economy (4)***
- ***Governance***
 - ***Involvement in democracy and trust in how the country is run (3)***
 - ***The natural environment (4)***
- ***In All 41 Indicators***

Why this topic?

- UK is becoming increasingly ethnically diverse (BME share increased from 8% in 1991 to 12% in 2001 and 20% in 2011)
- ONS reported SWB levels lower in unemployed, those without a life partner, certain BME groups (ONS 2012).
- Also revealed wide variations in wellbeing and happiness levels across geographical regions.
- Depressingly all BME groups reported higher levels of anxiety than the White ethnic group.
- ONS states "the differences observed across ethnic groups in SWB may in part be caused by the way that different people with different ethnic backgrounds respond to the SWB questions, but also the varied responses reflect the different circumstances that people find themselves in" (Hicks 2013:p1).

Objectives

1. To examine the current state of wellbeing and happiness across ethnic and cultural groups during 2011-12 and 2012-13.
2. To identify key variants (socioeconomic status, employment status, housing, deprivation level and other geographical factors, ageing and life-cycle attributes) overall and by ethnic groups
3. To determine the adjusted wellbeing and happiness levels by ethnic groups after controlling for demographic, socioeconomic, contextual and life-cycle factors.

Wellbeing questions in Annual Population Surveys

APS Coverage: 155,000 households/360,000 people in UK

Items of information: their own circumstances and experiences regarding housing, employment, education, health and wellbeing; etc.

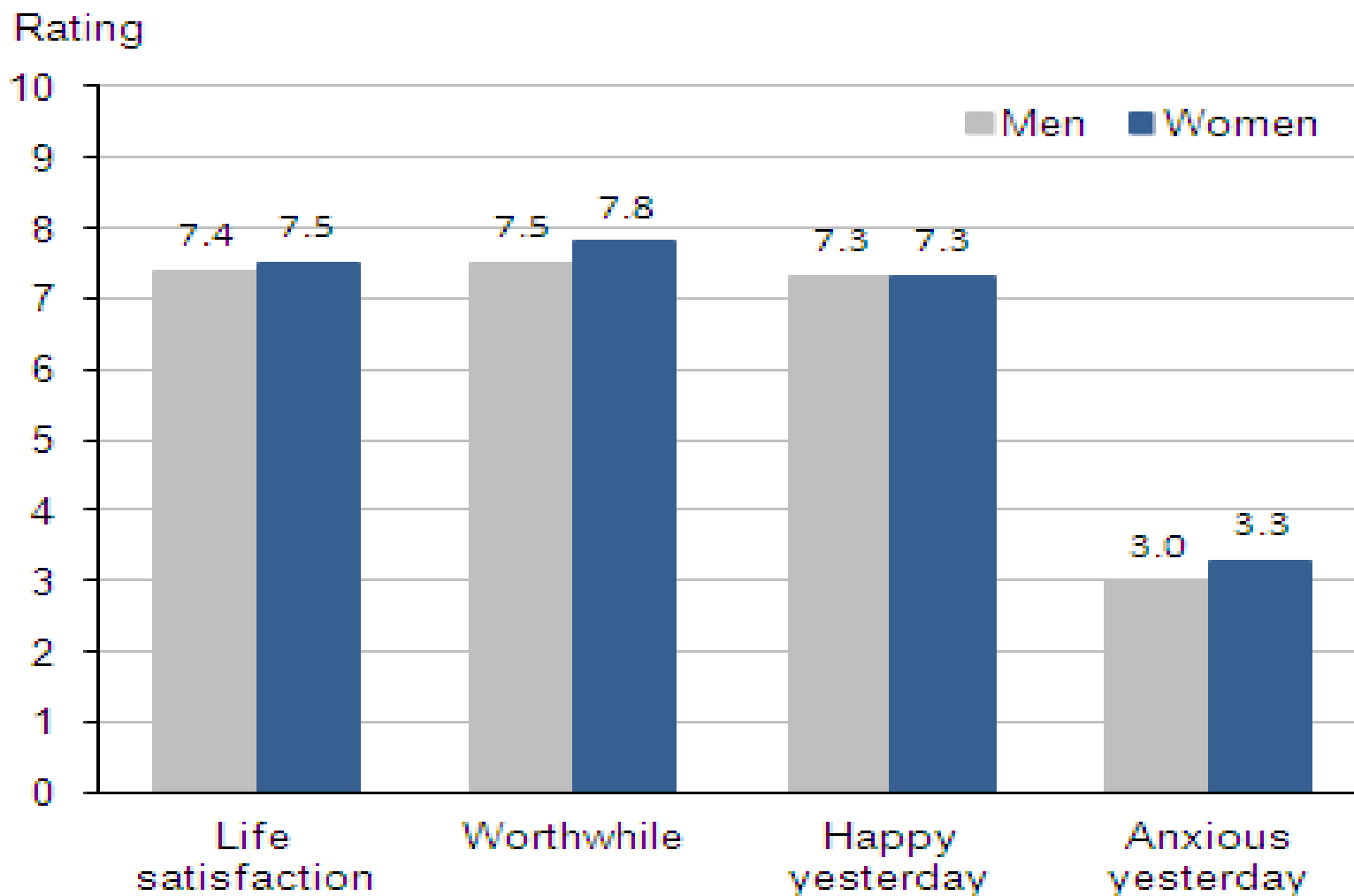
Wellbeing

- *Overall, how satisfied are you with your life nowadays?*
 - *Overall, to what extent do you feel the things you do in your life are worthwhile?*
 - Overall, how happy did you feel yesterday?
 - *Overall, how anxious did you feel yesterday?*
-
- Rating: 0 to 10 scale, where 0 = 'not at all' and 10 = 'completely'
 - No proxy response, uses both face-to-face and telephone interviews
 - Coverage: 165,000 people aged 16 and over**
 - Time period: Apr 2011-Mar 2012; Apr 2012-Mar 2013

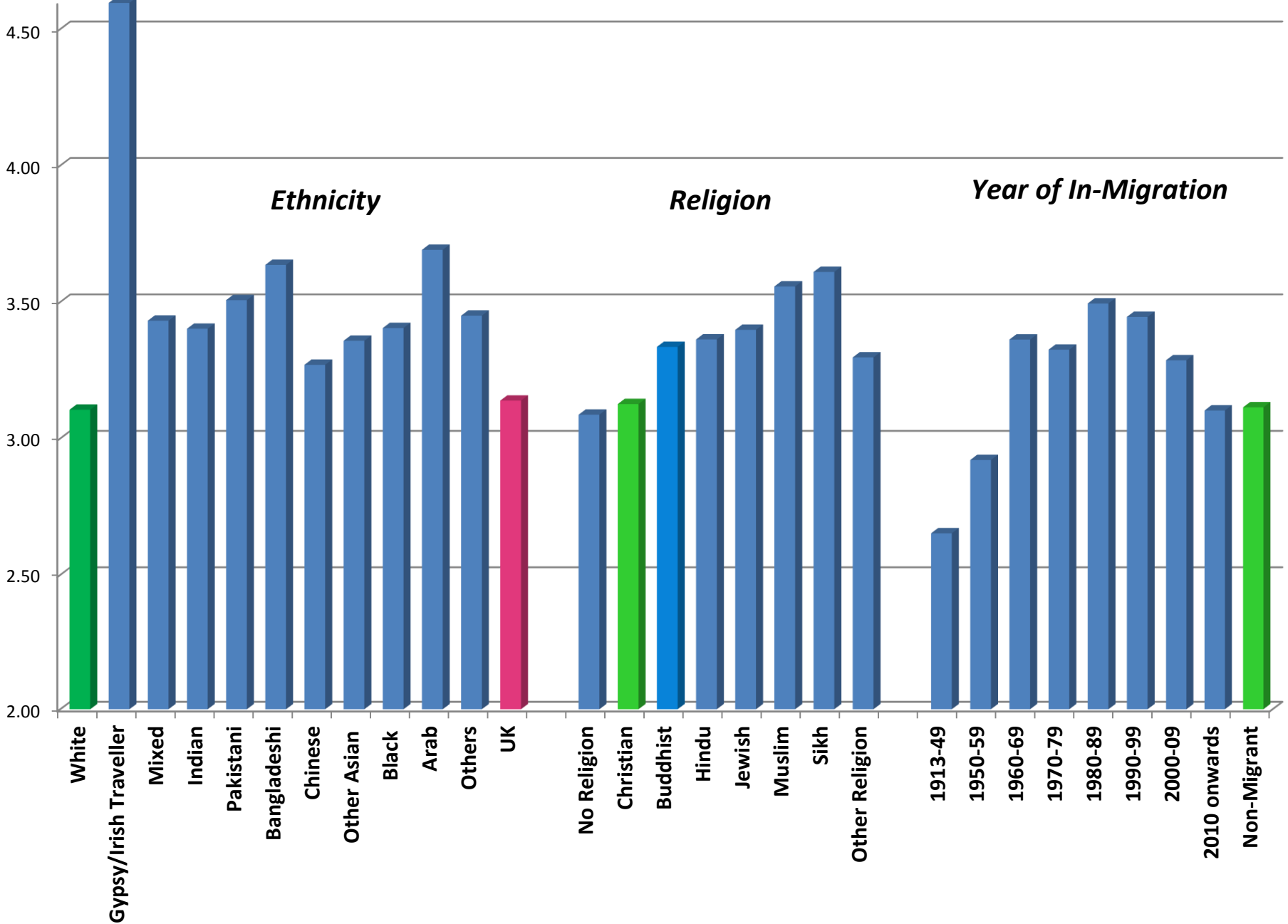
Subjective wellbeing: percentage of adults reporting very low, low, medium and high ratings, 2011–12

	Very low (0–4)	Low (5–6)	Medium (7–8)	High (9–10)	Average (mean)
Life satisfaction	6.6	17.5	49.8	26.1	7.4
Worthwhile	4.9	15.1	48.6	31.4	7.7
Happy yesterday	10.9	18.0	39.3	31.8	7.3
	Very high (6–10)	High (4–5)	Medium (2–3)	Low (0–1)	Average (mean)
Anxious yesterday	21.8	18.1	23.5	36.6	3.1

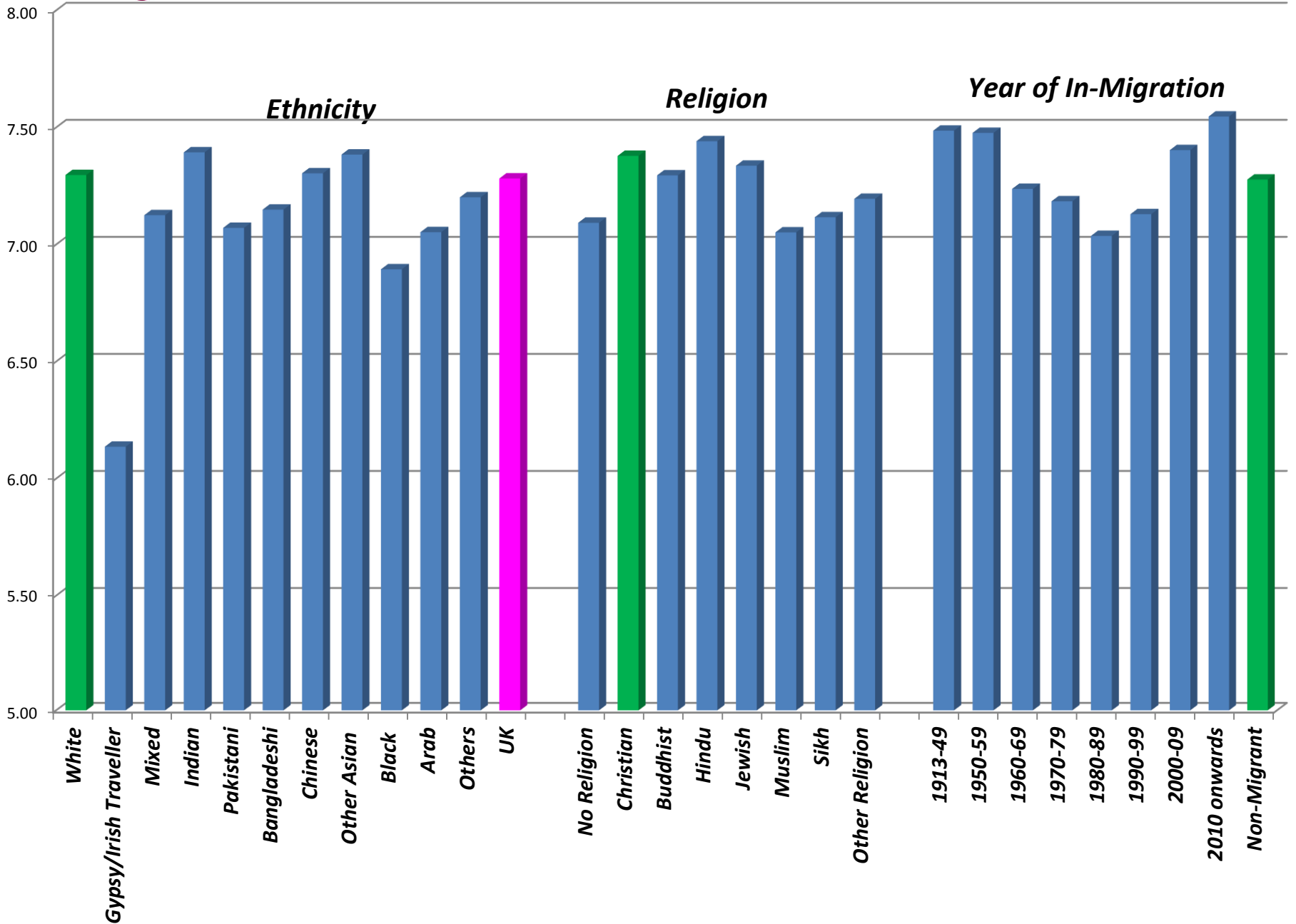
Subjective wellbeing ratings (mean) by gender, 2011–12



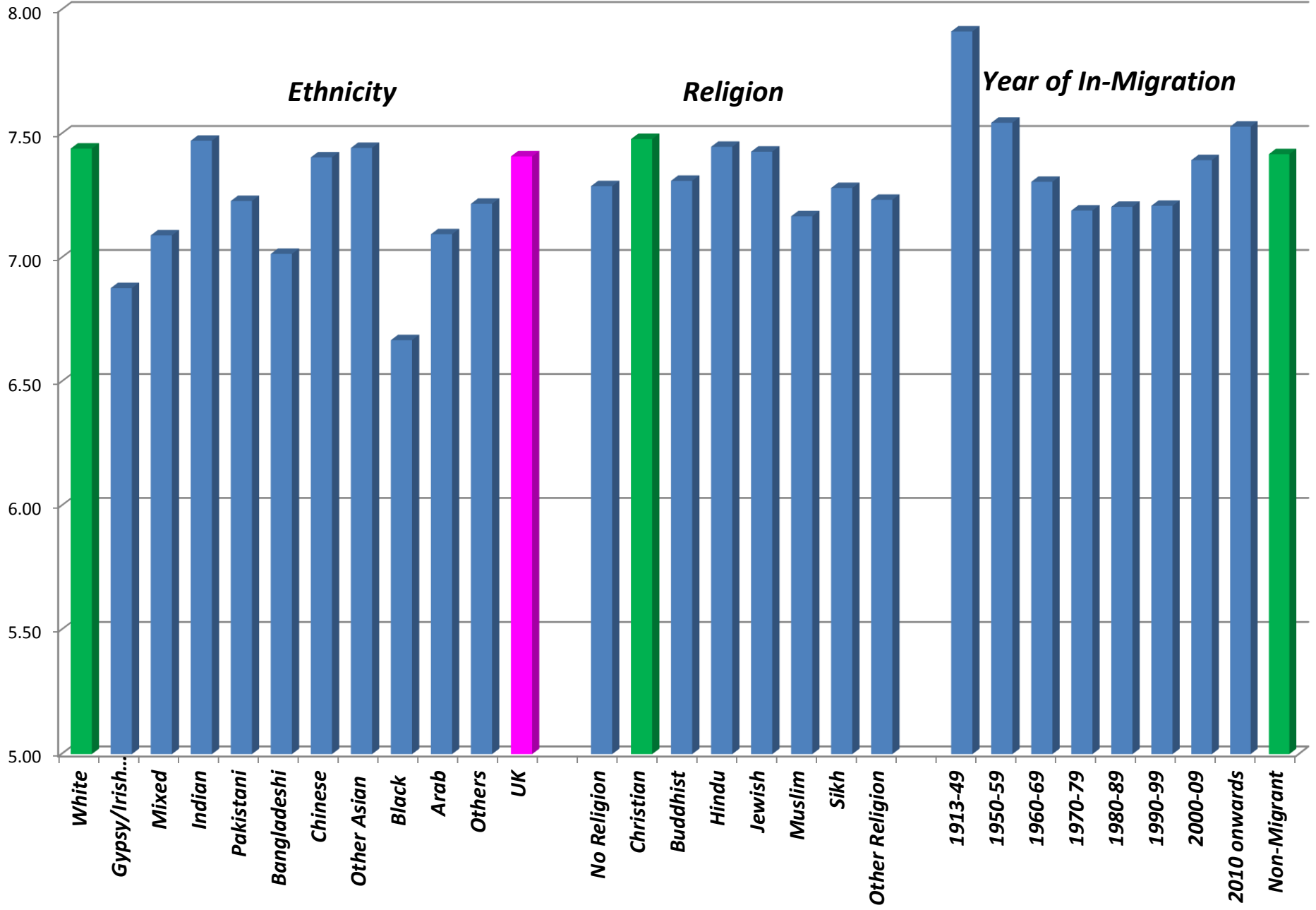
Mean Anxious Ratings by Ethnicity/Religion/Migration



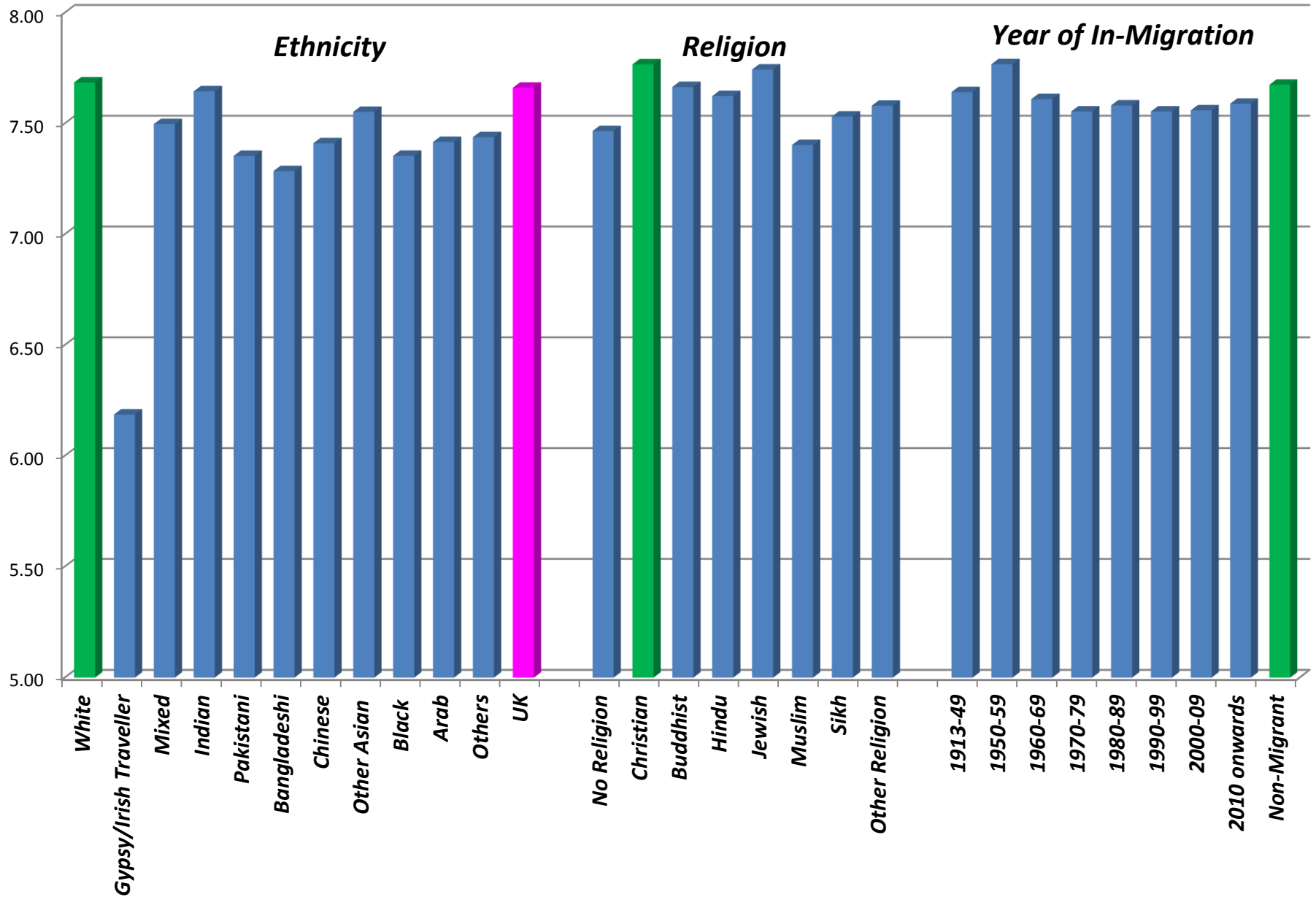
Mean Happy Ratings by Ethnicity/Religion/Migration



Mean Life Satisfaction Ratings by Ethnicity/Religion/Migration

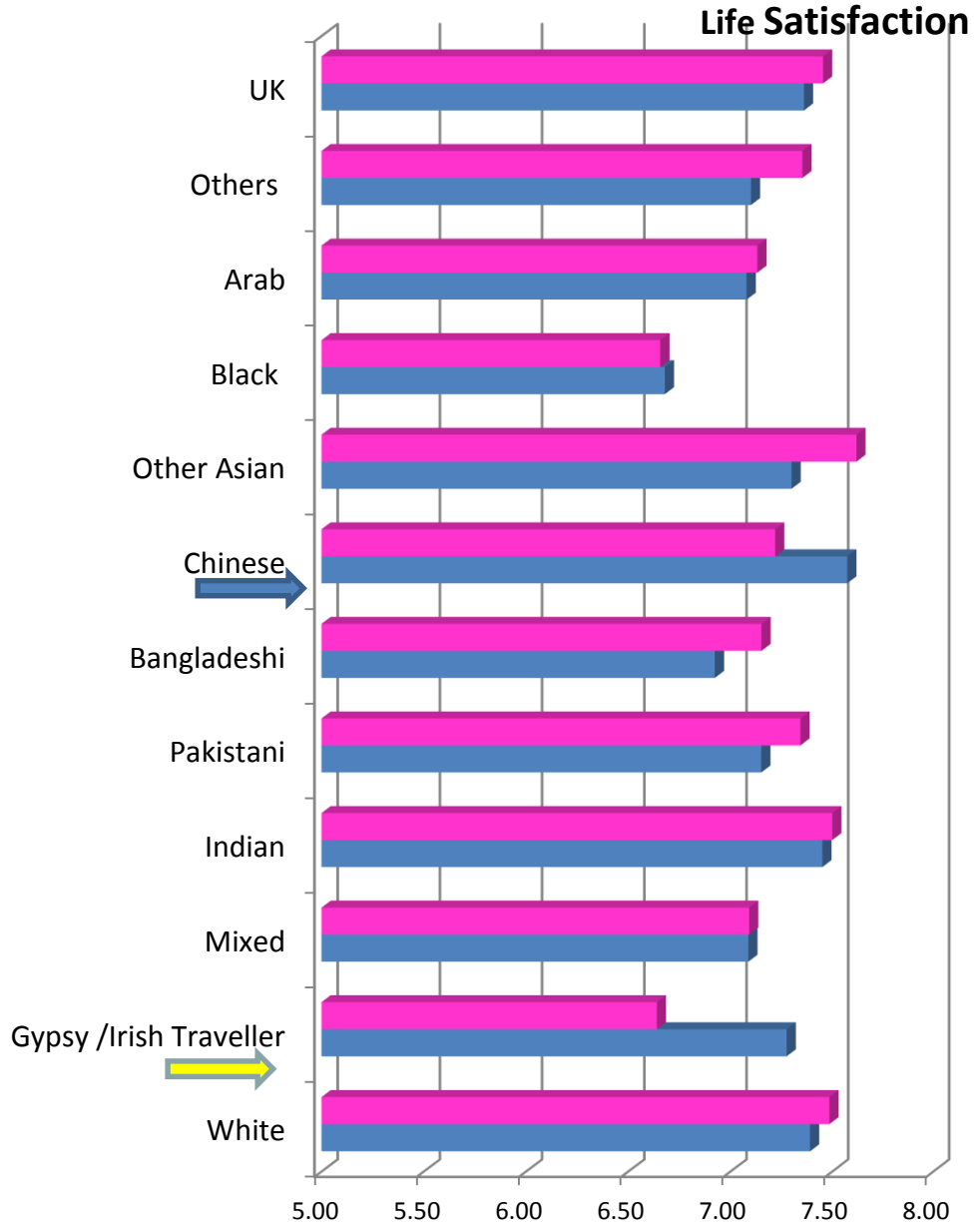
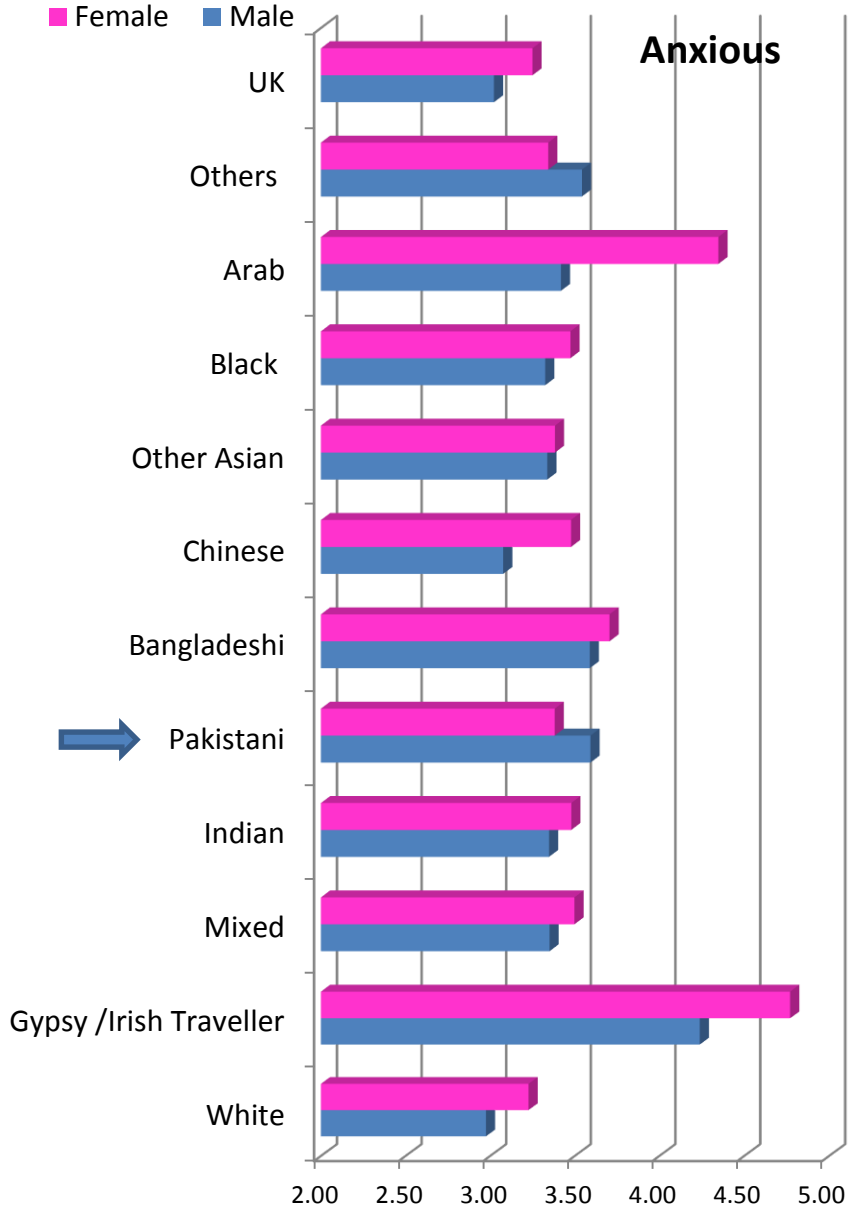


Mean Worthwhile Ratings by Ethnicity/Religion/Migration

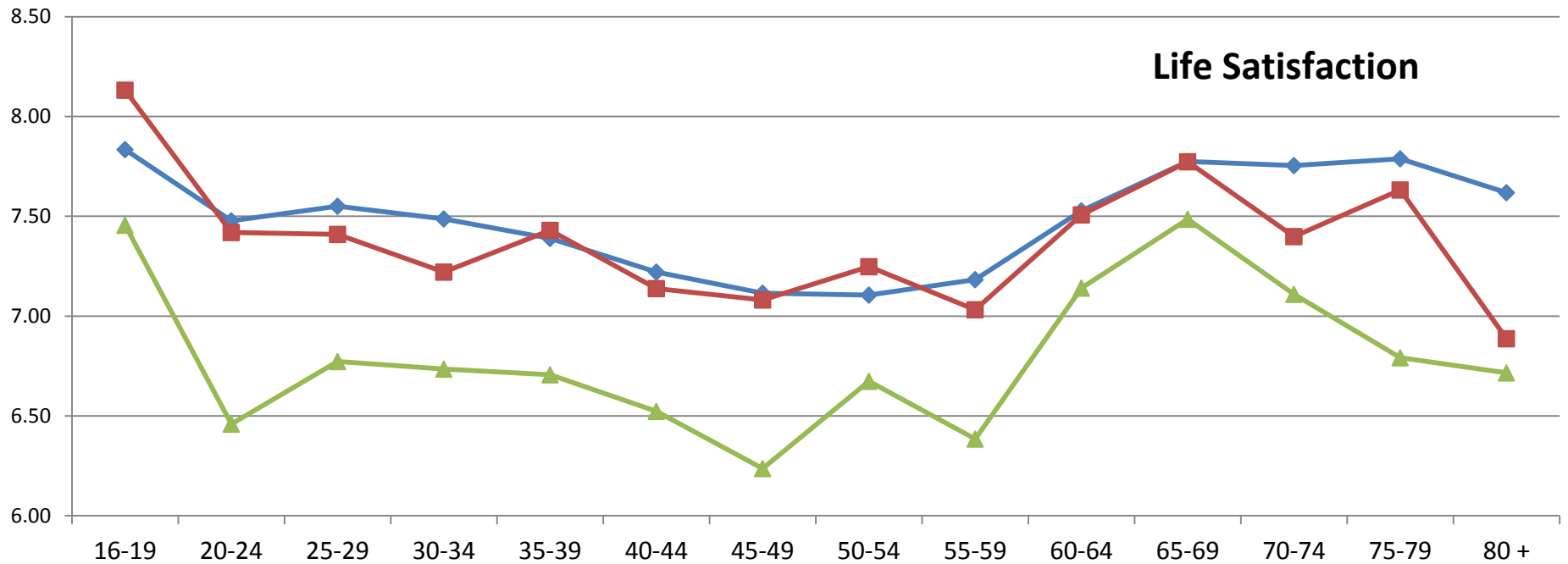
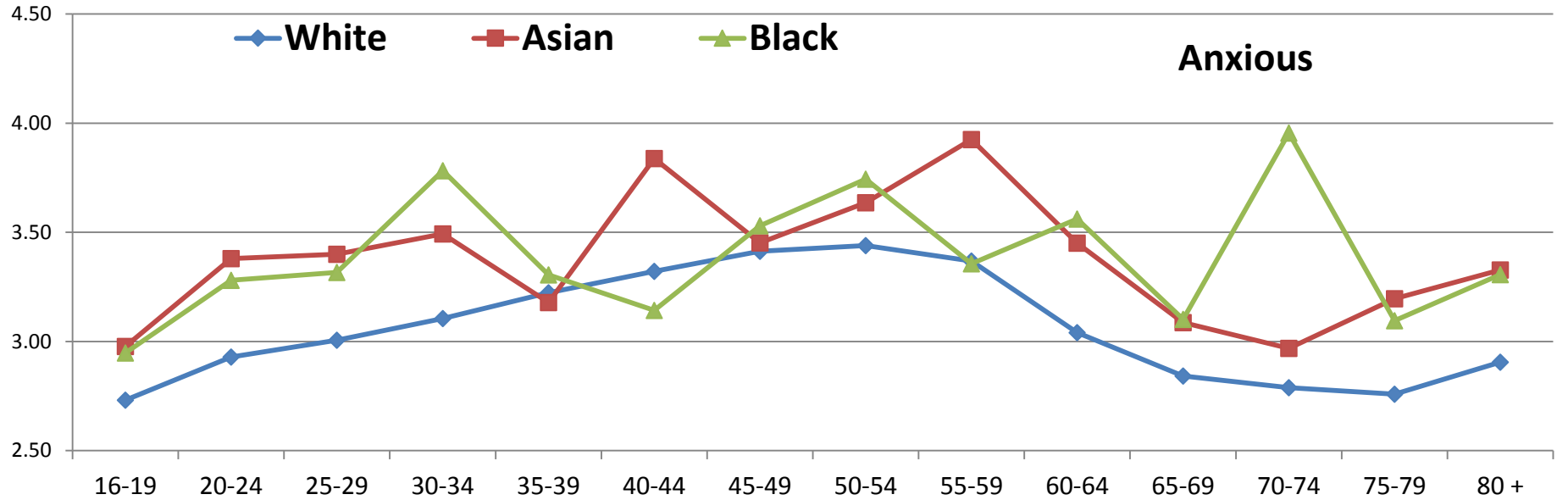


Mean Anxious & Life Satisfaction Ratings by Gender

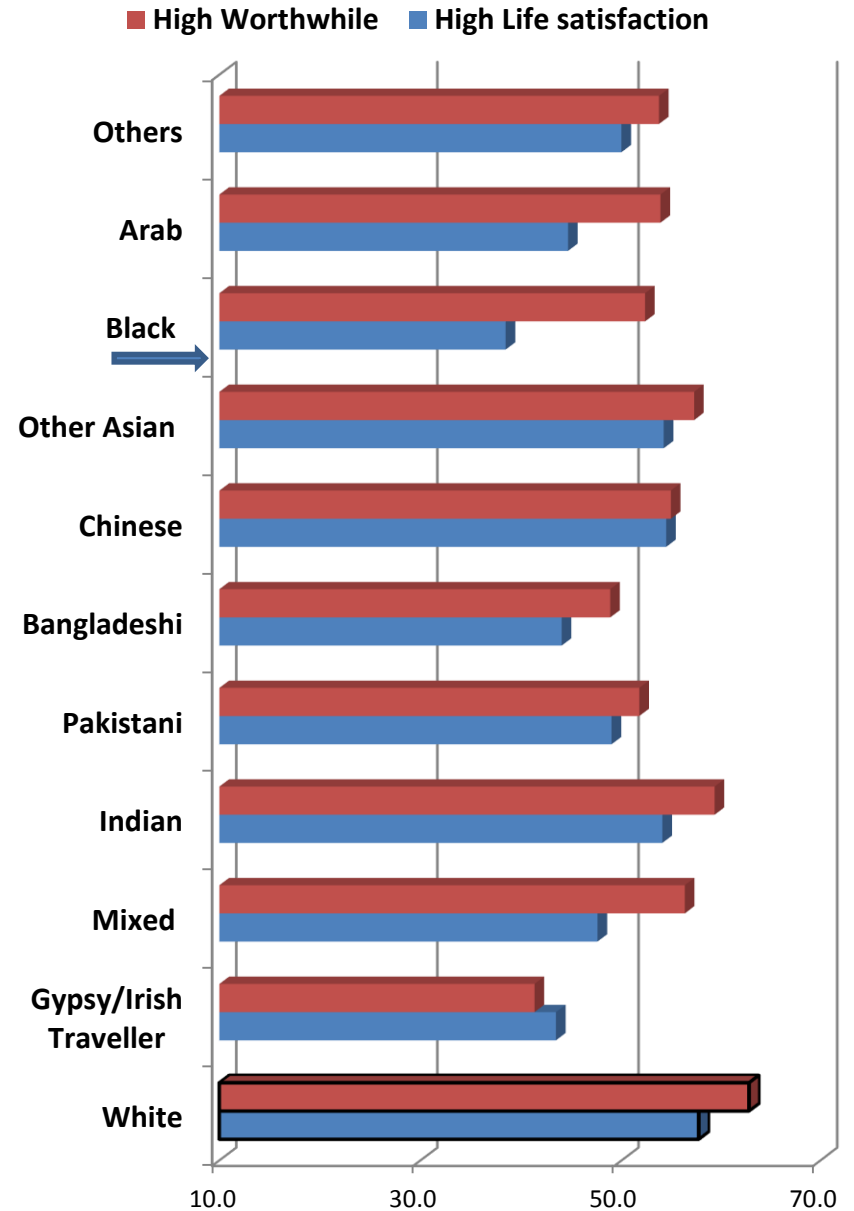
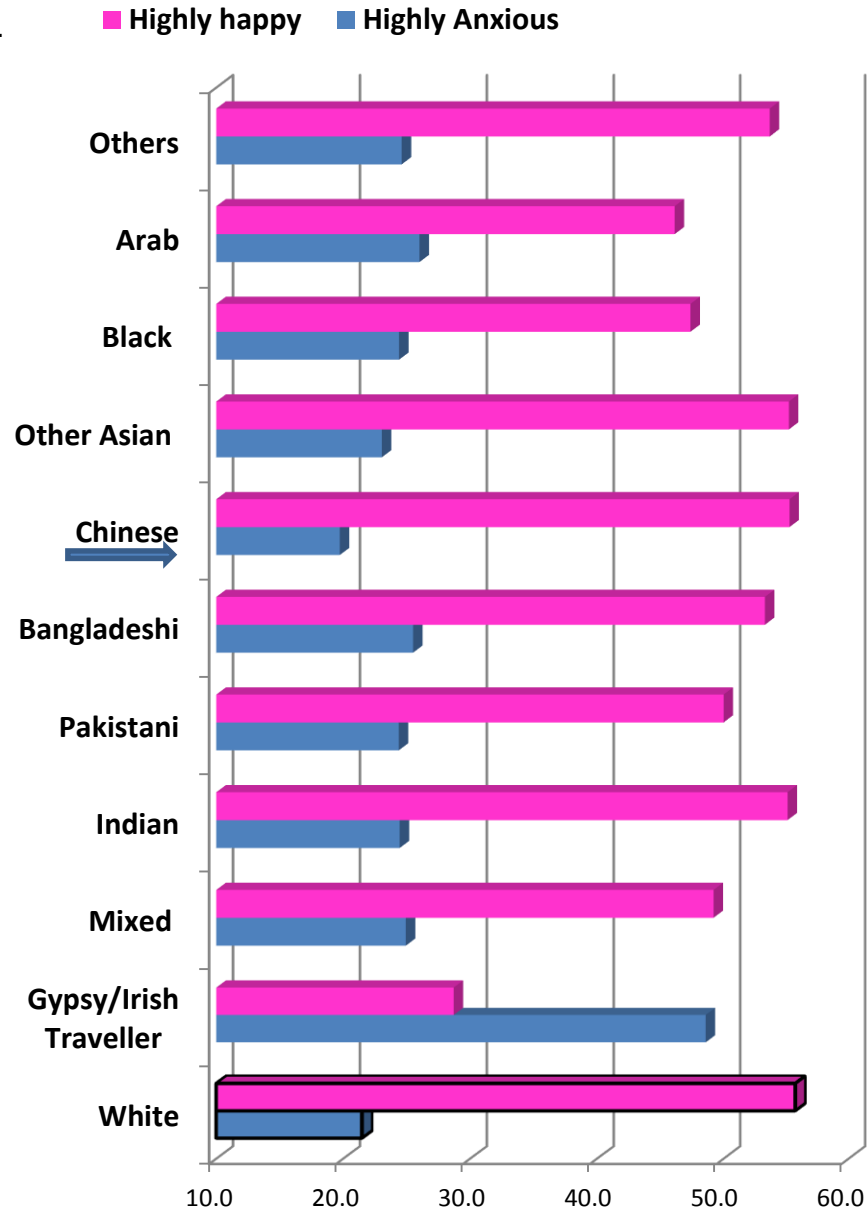
Female Male



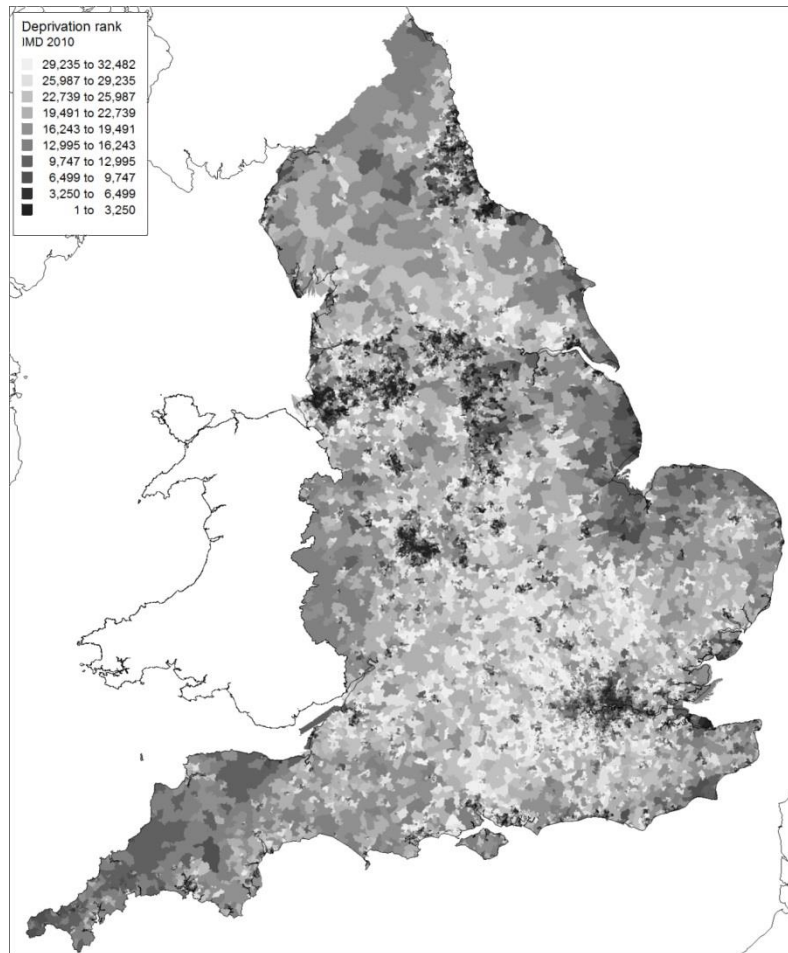
Mean Anxious & Life Satisfaction Ratings by Age



% Reported high(8-10) ratings of life satisfaction, worthwhile & happy, Very high(6-10) ratings of anxious

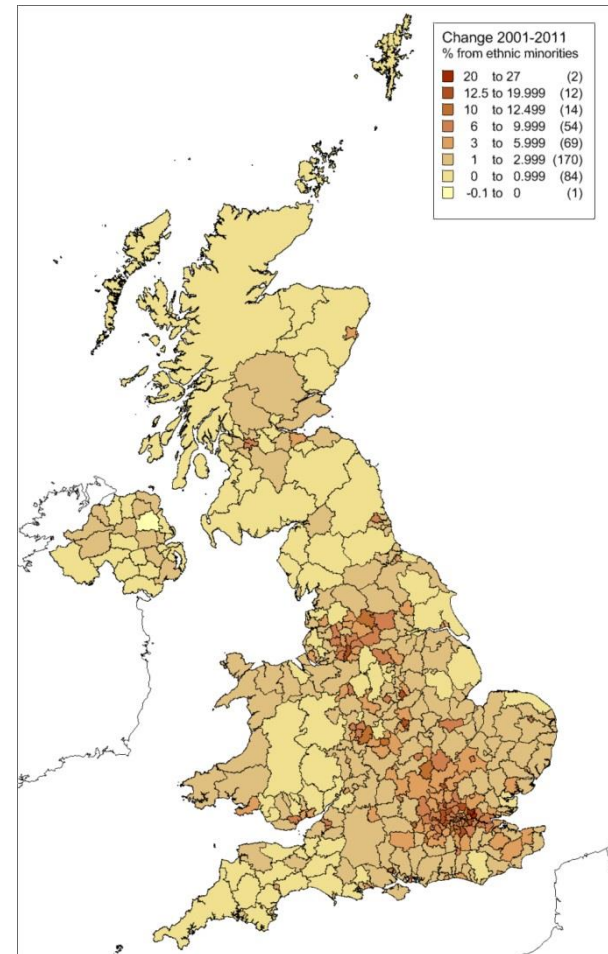
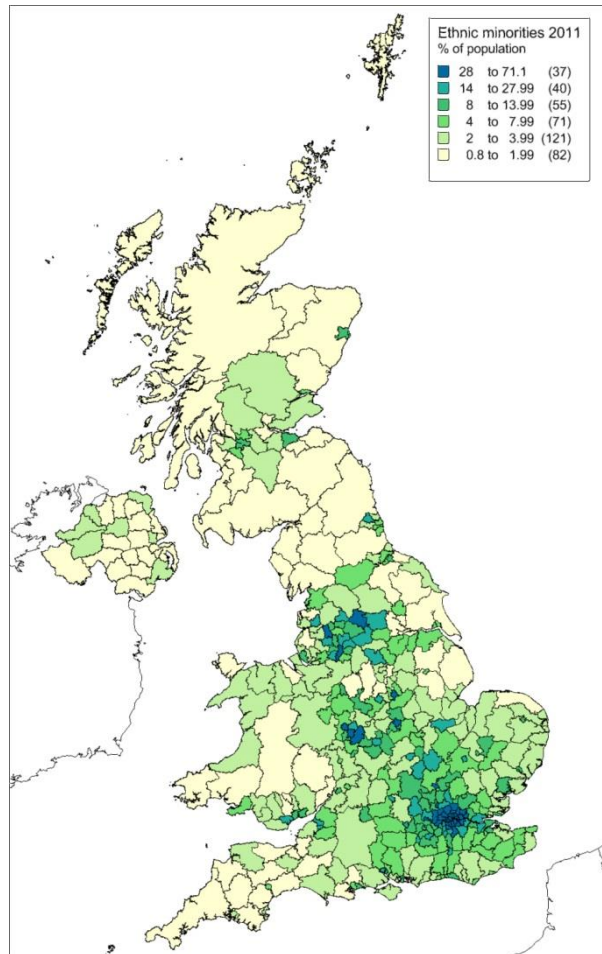


Deprivation within England, 2010



- 2010 Index of Multiple Deprivation for 32482 LSOAs in England.
- Greatest deprivation in inner areas of large cities.
- South-east corner of England least deprived.
- Suburbs and commuter fringes are relatively prosperous.
- Also deprivation in remoter and peripheral rural areas.

Geography of ethnic minorities

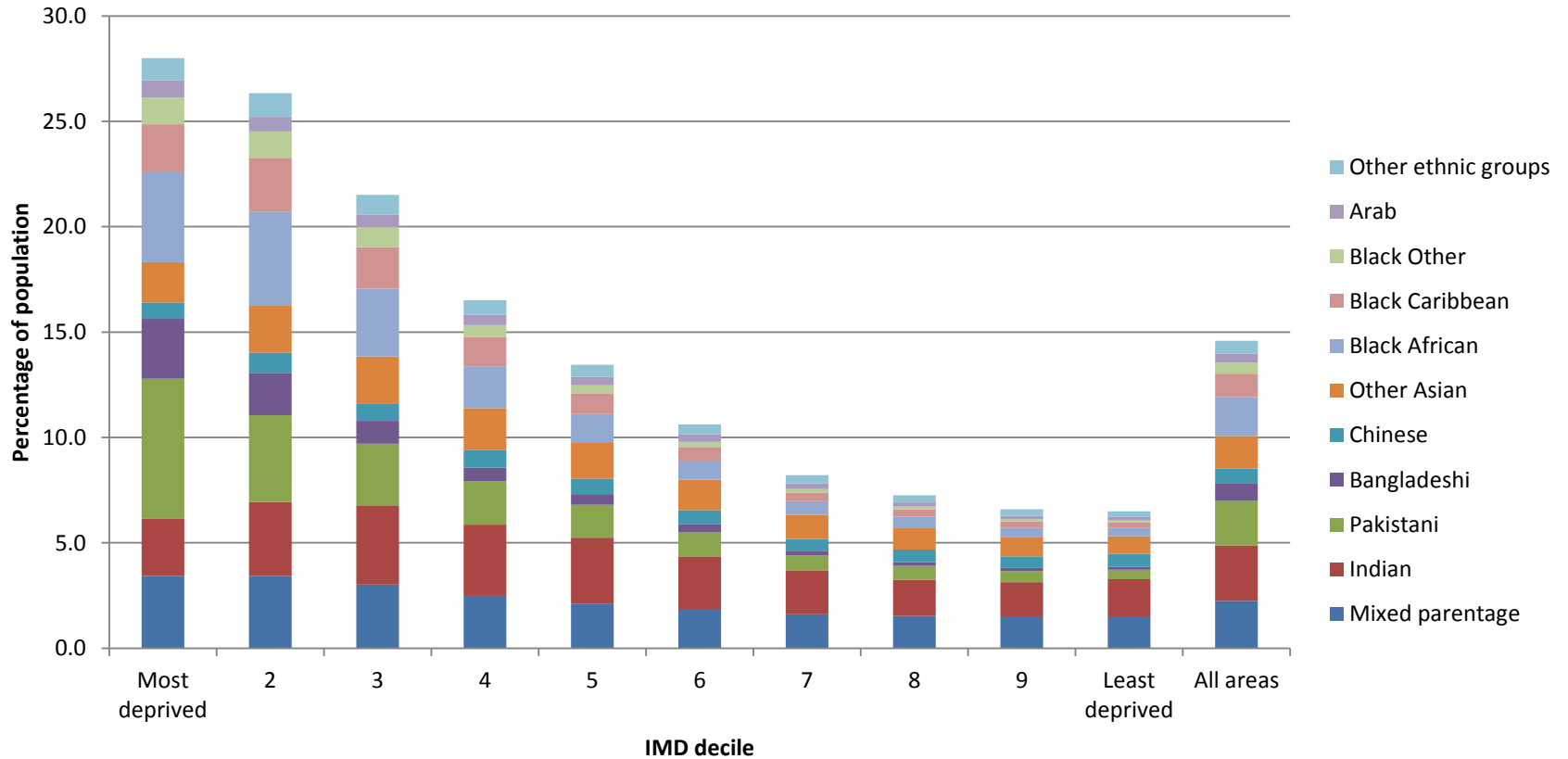


Minority population distribution

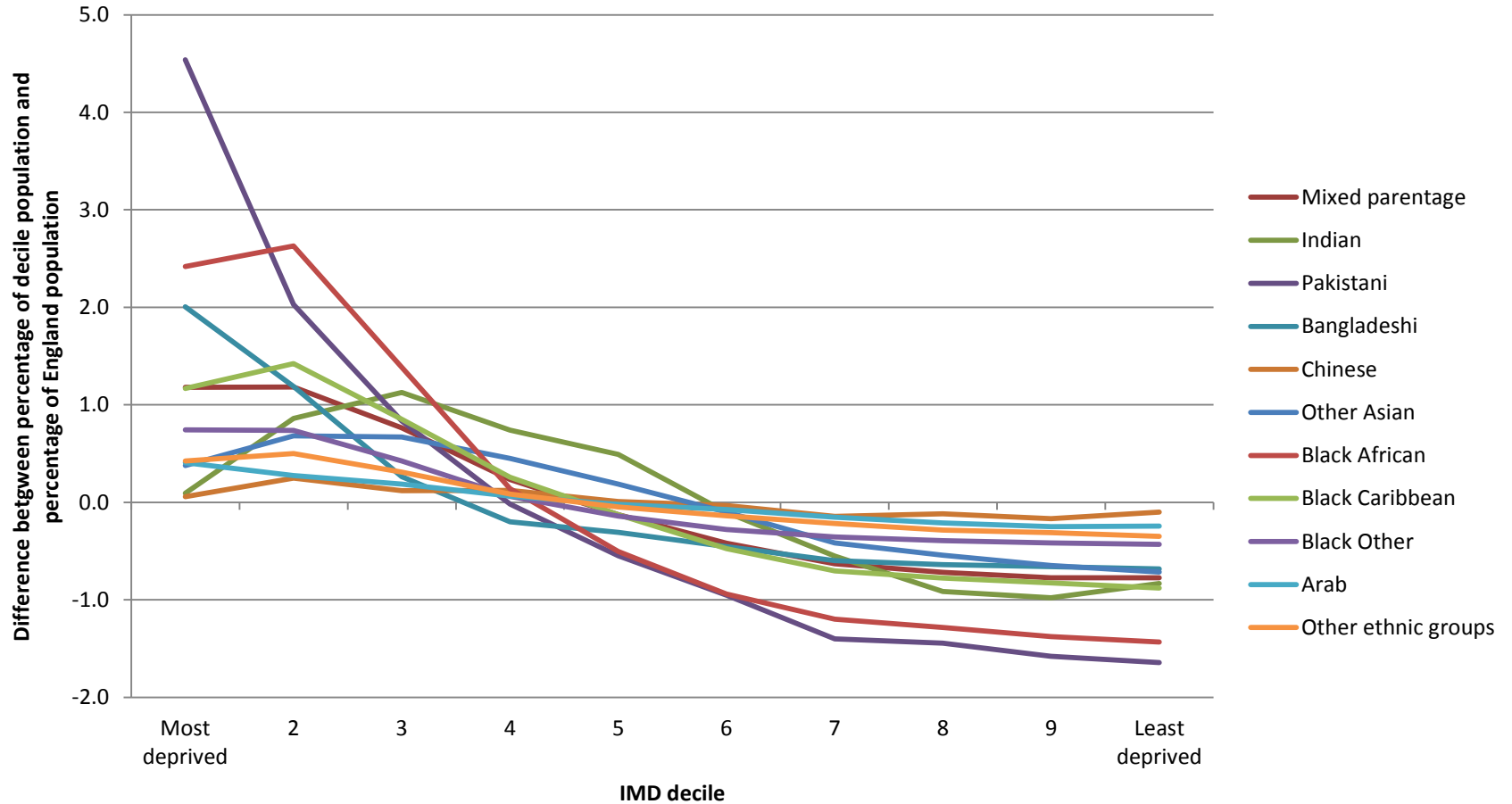
- The ethnic minority population in 2011 was still geographically concentrated into London and the larger cities of the English midlands and Pennine belt.
- There are significant populations in the commuter hinterlands of these cities and more accessible rural areas, but the ethnic minority share of the population is smallest in Northern Ireland, Wales, Scotland, eastern England, and the more rural periphery of England.
- However, the ethnic minority population grew in all parts of the UK between 2001 and 2011.
- The ethnic minority population spreading outwards from the traditional areas of concentration.
- However, these remained the locations of fastest growth between 2001 and 2011.

Ethnicity and deprivation

Distribution of ethnic minority groups by IMD decile



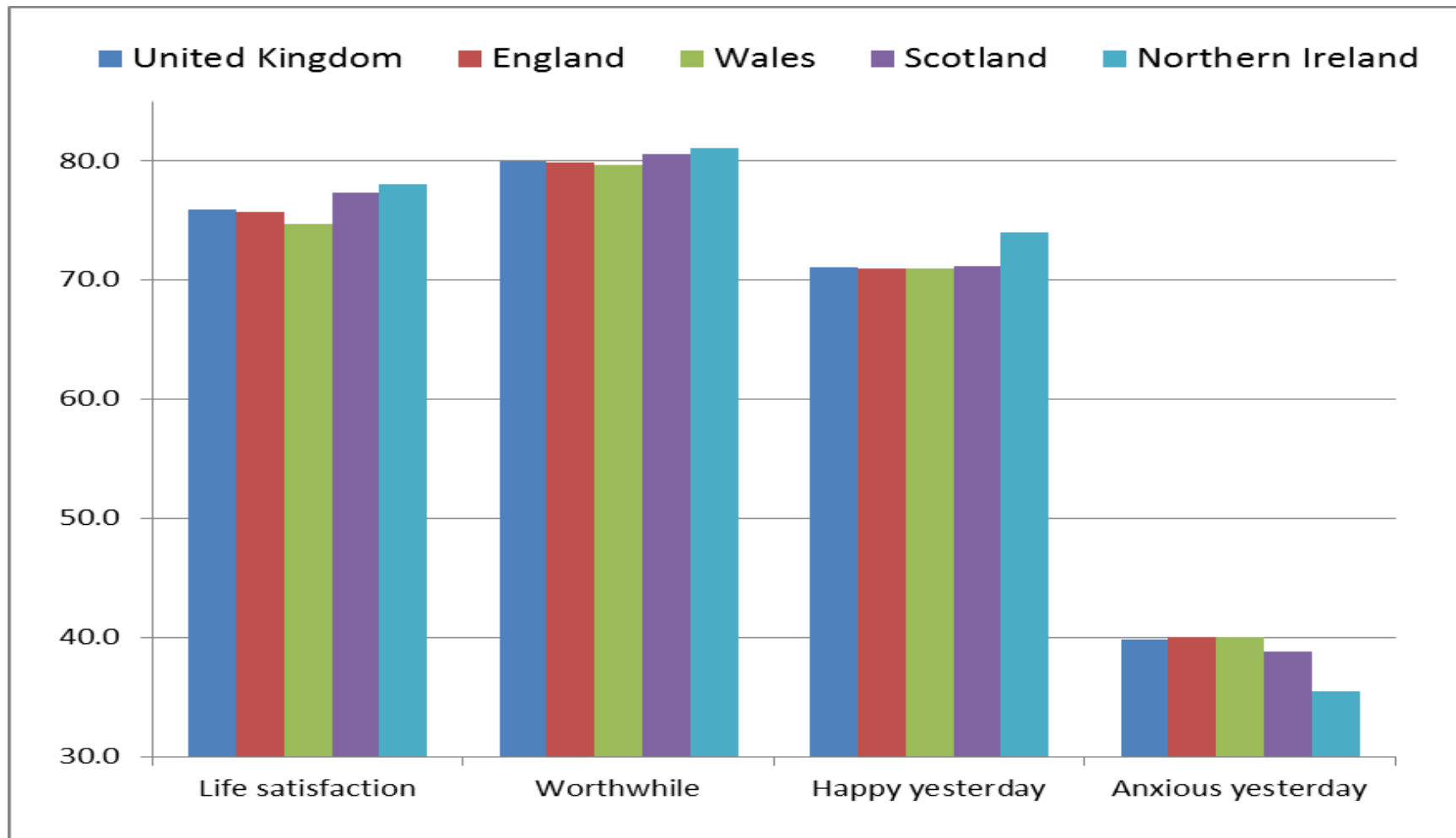
Over-representation by IMD decile



Ethnicity and disadvantage

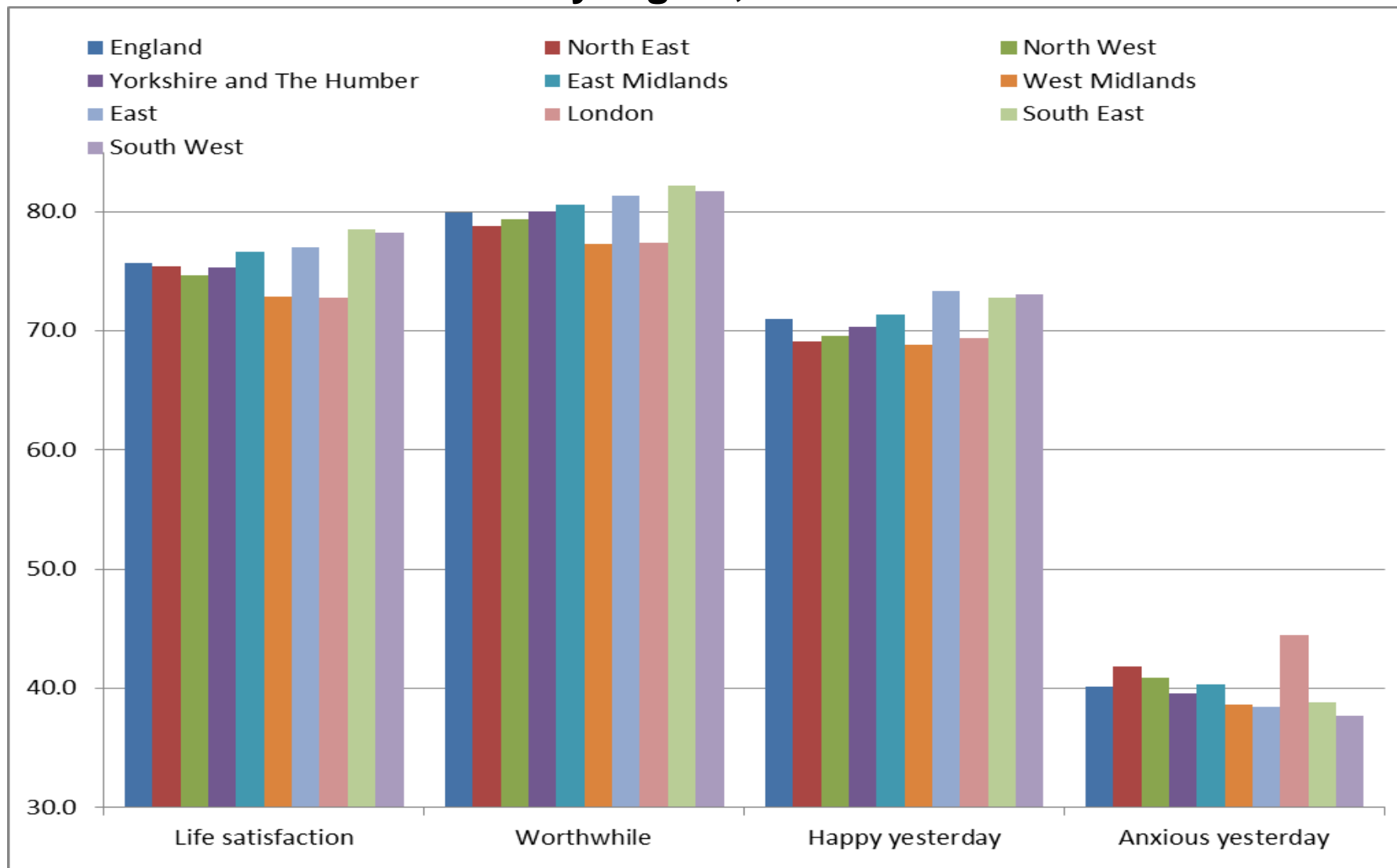
- The preceding charts show a clear pattern of geographical concentration of people from ethnic minorities in areas of relative deprivation.
- Ethnic minorities formed one-fifths of England's population in 2011. However, they formed more than a quarter of the population in each of the two most deprived deciles and only 6.5% of the population of the two least deprived deciles.
- 59.7% of Bangladeshi, 52.1% of Pakistani and 48.1% of Black-African people lived in the most deprived 20% of LSOAs.
- Indian and Chinese people were the least likely ethnic minorities to live in the most deprived 20% of LSOAs.
- 16% of Chinese, 12.9% of Indian and 12.9% of people of mixed parentage lived in the least deprived 20% of LSOAs.

% Reported medium/high (7-10) life satisfaction, worthwhile and happy yesterday ratings and high/very high (4-10) anxious yesterday ratings by countries of the UK, 2011-12

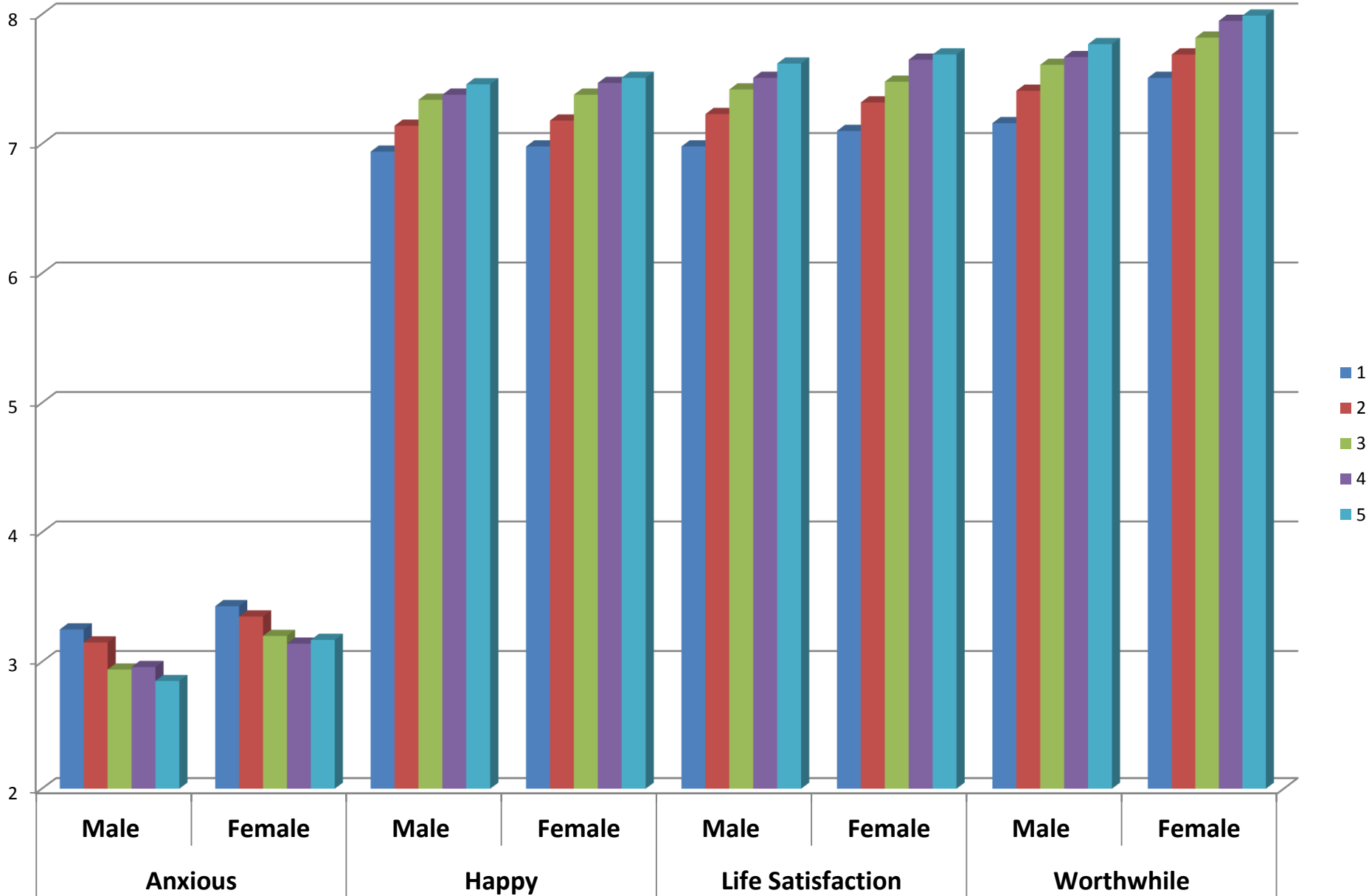


For 'Life satisfaction', 'Worthwhile' and 'Happy yesterday', medium/high is 7 to 10 on a 11 point scale (0 is not at all and 10 is completely). For 'Anxious yesterday', medium/low is 0 to 3 on the same scale.

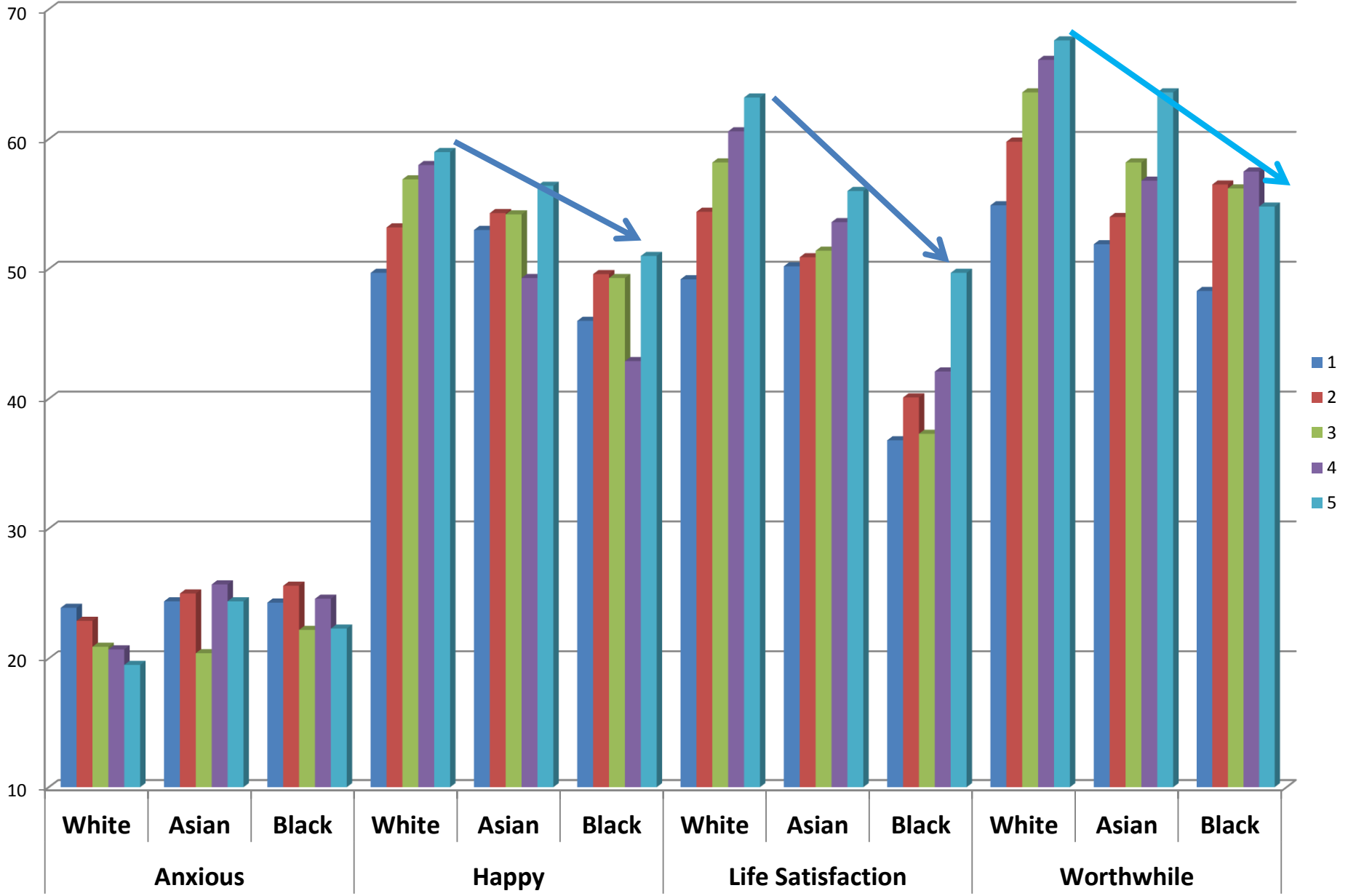
% Reported medium/high (7-10) life satisfaction, worthwhile and happy yesterday ratings and high/very high (4-10) anxious yesterday ratings by region, 2011-12



Mean Wellbeing Ratings by Gender and Deprivation (IMD) Quintiles, England



% Reported high(8-10) ratings of life satisfaction, worthwhile & happy, Very high(6-10) ratings of anxious by deprivation (IMD) quintiles, England



Geographical variations in Quality of Life

- Scores on each indicator are most favourable in the most prosperous IMD quintiles and least favourable in the most deprived quintiles.
- This pattern is similar for White, Black and Asian ethnic groups.
- QoL scores are least favourable in London and the West Midlands, in which the percentage of the population from ethnic minorities is largest.
- This suggests that ethnic minorities tend to live in areas of higher deprivation and lower QoL.

Multivariate Analyses

Dependent: High Life satisfaction, Worthwhile and Happy yesterday ratings and Very High Anxious yesterday rating

Logistic Regression Models

Model 1 (1 variable): Ethnic groups

Model 2 (3 variables): + Demographic (age, gender)

Model 3 (5 variables): + Social (marital status, education completion age, religion)

Model 4 (10 variables): + + Health Status (chronic condition, disability, limits activity, health status, smoking)

Model 5 (18 variables): + + + SES (highest education, employment type, occupation, job type, public/private, weekly pay, home ownership, benefits)

Model 6 (21 variables): + + + + Contextual (deprivation, years of residence, year of in-migration, geographical region)

Forward Stepwise	Anxious	Happy	Life Satisfaction	Worthwhile
1	Health status	Health status	Health status	Health status
2	Age group	Age group	Age group	Age group
3	Gender	Marital status	Marital status	Marital status
4	Employment type	Employment type	Employment type	Gender
5	Limits activity	Gender	Ethnicity	Employment type
6	Region	Smoking	Smoking	Public/private
7	Smoking	House ownership	House ownership	Ethnicity
8	Edu compl age	Region	Occupation	Smoking
9	Ethnicity	Highest edu	Gender	Occupation
10	Marital status	Ethnicity	Edu compl age	Region
11	Job type	Occupation	Disable	Highest edu
12	House ownership	Disable	Job type	Edu compl age
13	Chronic condition	Weekly pay	Weekly pay	House ownership
14	Years of residence	Chronic condition	Region	Benefits
15	IMD quintile	Limits activity	Highest edu	Weekly pay
16	Highest edu	Benefits	Benefits	Job type
17	Occupation	Job type	Chronic condition	Disable
18	Benefits	Public/private	Years of residence	Chronic condition
19	Public/private	Edu compl age	Limits activity	Years of residence
20	Disable	Years of residence	Public/private	IMD quintile
21	Weekly pay	IMD quintile	IMD quintile	Limits activity
Rejected Variables				

	Determinants	Base(Total)category	Anxious
1. Culture	Ethnicity	White (18)	Higher in all BME
2. Demographic	Age group	Adolescent (14)	Non-linear: inverted U shape
	Gender	Female (2)	Lower in male
3. Social	Marital status	Single (6)	Lower in Married
	Edu. completion age	up to 15 (6)	Lower in young edu-age
4. Health	Religion	No religion (8)	Much higher in all Non-Christian
	Health status	Very Good (5)	Rises as health deteriorates
	Chronic condition	None (2)	Higher
	Disability	None (2)	NS
	Limits activity	None (2)	Higher
5. Economic	Smoking	Never (3)	Highest in Smoker
	Employment type	Inactive (5)	Higher in Unemployed
	Occupation	Inactive (8)	NS
	Job type	Temporary (2)	Lower in Permanent
	Public/private sector	Private (2)	NS
	Weekly pay	£750 + (6)	NS
	Benefits	None (2)	NS
	Home ownership	Owned outright (5)	Lowest for owning outright
	Highest education	No education (7)	NS
6. Contextual	Geographical region	London (9)	Lower in all region (except NE)
	Years of residence	< 12 months (6)	Lower in 5-9 years residency
	Deprivation (IMD)	Highest (5)	Higher in Second quintile
	Year of in-migration	Since 2010 (9)	Higher in migrants came: 1960-2009

		Anxious (Forward Stepwise Entry by Importance)			
		Determinants	All	White	Asian
1. Culture	Ethnicity	10	12	11	Rejected
2. Demographics	Age group	2	2	4	5
	Gender	3	3	9	Rejected
3. Social	Marital status	10	10	6	Rejected
	Edu. compl age	8	7	8	Rejected
4. Health	Health status	1	1	1	1
	Chronic condition	13	15	Rejected	Rejected
	Disability	Rejected	4	Rejected	Rejected
	Limits activity	5	13	Rejected	Rejected
5. Economic	Smoking	7	6	Rejected	3
	Employment type	4	5	5	Rejected
	Occupation	Rejected	Rejected	Rejected	Rejected
	Job type	11	11	Rejected	4
	Public/private sector	Rejected	Rejected	10	Rejected
	Weekly pay	Rejected	Rejected	Rejected	Rejected
	Benefits	Rejected	16	Rejected	Rejected
6. Contextual	Home ownership	12	8	7	2
	Highest education	Rejected	Rejected	Rejected	6
	Region	6	9	2	7
	Year of residence	14	14	3	8
	Deprivation (IMD)	15	Rejected	12	Rejected
Number of Accepted Variables		15	14	12	8

	Determinants	Base(Total)category	Happy
1. Culture	Ethnicity	White (18)	Lower in most BME
2. Demographic	Age group	Adolescent (14)	Non-linear: U shape
	Gender	Female (2)	Lower in male
3. Social	Marital status	Single (6)	Higher in Married, Lower in Widowed
	Edu. completion age	up to 15 (6)	NS
4. Health	Religion	No religion (8)	Much Lower in Muslim, Sikh
	Health status	Very Good (5)	Decreases as health deteriorates
	Chronic condition	None (2)	Higher
	Disability	None (2)	NS
	Limits activity	None (2)	NS
	Smoking	Never (3)	Lowest in Smoker
5. Economic	Employment type	Inactive (5)	Lower in Unemployed, Employees
	Occupation	Inactive (8)	Higher in Lower Supervisor/technical
	Job type	Temporary (2)	NS
	Public/private sector	Private (2)	NS
	Weekly pay	£750 + (6)	Higher in middle income
	Benefits	None (2)	NS
	Home ownership	Owned outright (5)	Lower for having Mortgage, Rented
	Highest education	No education (7)	Higher in Other qualification
6. Contextual	Geographical region	London (9)	Higher in all region (except NE, WM)
	Year of residence	< 12 months (6)	NS
	Deprivation (IMD)	Highest (5)	NS
	Year of in-migration	Since 2010 (9)	Lower in migrants came:1960-1999

	Determinants	Happy (Forward Stepwise Entry by Importance)			
		All	White	Asian	Black
1. Culture	Ethnicity	10	Rejected	9	9
2. Demographics	Age group	2	2	3	3
	Gender	5	6	Rejected	Rejected
3. Social	Marital status	3	3	2	1
	Edu. compl age	Rejected	Rejected	Rejected	Rejected
4. Health	Health status	1	1	1	2
	Chronic condition	14	Rejected	8	Rejected
	Disability	12	10	Rejected	Rejected
	Limits activity	Rejected	Rejected	Rejected	Rejected
5. Economic	Smoking	6	5	4	5
	Employment type	4	4	5	8
	Occupation	11	Rejected	11	11
	Job type	Rejected	Rejected	Rejected	Rejected
	Public/private sector	Rejected	Rejected	Rejected	Rejected
	Weekly pay	13	12	Rejected	Rejected
	Benefits	Rejected	Rejected	Rejected	10
	Home ownership	7	8	11	4
	Highest education	9	7	7	9
6. Contextual	Region	8	9	10	Rejected
	Year of residence	14	Rejected	Rejected	6
	Deprivation (IMD)	Rejected	13	6	7
Number of Accepted Variables		14	13	12	11

	Determinants	Base(Total)category	Life Satisfaction
1. Culture	Ethnicity	White (18)	Lower in most BME
2. Demographic	Age group	Adolescent (14)	Non-linear: U shape
3. Social	Gender	Female (2)	Lower in male
	Marital status	Single (6)	Higher in Married, Lower in Separated
	Edu. completion age	up to 15 (6)	Declines with edu-age
4. Health	Religion	No religion (8)	Much Lower in Muslim, Sikh
	Health status	Very Good (5)	Declines sharply as health deteriorates
	Chronic condition	None (2)	Higher
	Disability	None (2)	Lower
	Limits activity	None (2)	NS
	Smoking	Never (3)	Lowest in Smoker
	5. Economic	Employment type	Inactive (5)
Occupation		Inactive (8)	Higher in top occu, Lower in lower occu
Job type		Temporary (2)	Higher in Permanent
Public/private sector		Private (2)	NS
Weekly pay		£750 + (6)	Low in lower income
Benefits		None (2)	Lower
Home ownership		Owned outright (5)	Lower for having Mortgage, Rented
6. Contextual	Highest education	No education (7)	Lower in higher qualification
	Geographical region	London (9)	Higher in all region (except WM)
	Year of residence	< 12 months (6)	Higher in 1-2 years residency
	Deprivation (IMD)	Highest (5)	NS
	Year of in-migration	Since 2010 (9)	Much lower in migrants: 1960- 1999

	Determinants	Life Satisfaction (Forward Stepwise Entry)			
		All	White	Asian	Black
1. Culture	Ethnicity	5	18	8	Rejected
2. Demographics	Age group	2	2	2	2
	Gender	9	8	5	Rejected
3. Social	Marital status	3	3	3	5
	Edu. compl age	10	11	6	6
4. Health	Health status	1	1	1	1
	Chronic condition	17	16	Rejected	Rejected
	Disability	11	9	Rejected	Rejected
	Limits activity	Rejected	Rejected	7	Rejected
5. Economic	Smoking	6	5	9	10
	Employment type	4	4	4	4
	Occupation	8	7	Rejected	9
	Job type	12	12	Rejected	8
	Public/private sector	Rejected	Rejected	Rejected	Rejected
	Weekly pay	13	10	11	Rejected
	Benefits	16	15	Rejected	11
6. Contextual	Home ownership	7	6	11	3
	Highest education	15	14	Rejected	7
	Region	14	13	10	Rejected
	Year of residence	18	17	Rejected	Rejected
	Deprivation (IMD)	Rejected	Rejected	Rejected	Rejected
Number of Accepted Variables		18	18	11	11

	Determinants	Base(Total)category	Worthwhile
1. Culture	Ethnicity	White (18)	Lower in most BME
2. Demographic	Age group	Adolescent (14)	Non-linear: U shape
	Gender	Female (2)	Lower in male
3. Social	Marital status	Single (6)	Higher in Married, Divorced
	Edu. completion age	up to 15 (6)	Declines with edu-age
	Religion	No religion (8)	Much Lower in Muslim and Sikh
4. Health	Health status	Very Good (5)	Declines sharply as health deteriorates
	Chronic condition	None (2)	Higher
	Disability	None (2)	Lower
	Limits activity	None (2)	NS
	Smoking	Never (3)	Lowest in Smoker
5. Economic	Employment type	Inactive (5)	Lower in Unemployed, Higher in SE
	Occupation	Inactive (8)	Higher: Top 2 occu, Lower: Bottom occu
	Job type	Temporary (2)	Higher in Permanent
	Public/private sector	Private (2)	Lower in Private
	Weekly pay	£750 + (6)	low in lower income
	Benefits	None (2)	Higher
	Home ownership	Owned outright (5)	Lower for rented
	Highest education	No education (7)	Higher and rises with qualification
6. Contextual	Geographical region	London (9)	Higher in all region (except WM)
	Year of residence	< 12 months (6)	Higher in 1-2 and 2-3 years residency
	Deprivation (IMD)	Highest (5)	Higher in Fourth and Top quintile
	Year of in-migration	Since 2010 (9)	Much higher in migrants: Before 1960

	Determinants	Worthwhile (Forward Stepwise Entry)			
		All	White	Asian	Black
1. Culture	Ethnicity	7	20	12	12
2. Demographics	Age group	2	3	3	5
	Gender	4	5	6	4
3. Social	Marital status	3	2	2	1
	Edu. compl age	12	11	10	14
4. Health	Health status	1	1	1	2
	Chronic condition	18	17	8	Rejected
	Disability	17	18	Rejected	Rejected
	Limits activity	Rejected	Rejected	Rejected	Rejected
5. Economic	Smoking	8	7	9	3
	Employment type	5	4	4	10
	Occupation	9	8	7	7
	Job type	16	15	Rejected	Rejected
	Public/private sector	6	6	Rejected	11
	Weekly pay	15	14	Rejected	6
	Benefits	14	13	13	Rejected
	Home ownership	13	12	Rejected	Rejected
6. Contextual	Highest education	11	10	11	13
	Region	10	9	5	9
	Year of residence	19	16	Rejected	15
	Deprivation (IMD)	20	19	Rejected	8
Number of Accepted Variables		20	20	13	15

Adjusted Very High Anxious Rating Odds Ratio for Ethnic Minority Groups

Ethnic Groups	Anxious						Inferences
	M1	M2	M3	M4	M5	M6	
White British	1	1	1	1	1	1	
White Irish	1.31*	1.31*	1.31*	1.28*	1.27*	1.23*	4th Highest
Gypsy/Irish traveller	3.71*	3.68*	3.32*	2.73*	2.61*	2.61*	1st Highest
Other White	0.98	1.01	1.04	1.07*	1.07	1.04	
White & Black Caribbean	1.13	1.14	1.11	1.05	1.02	1.01	
White & Black African	1.48*	1.42	1.38	1.38	1.32	1.28	Disappear
White and Asian	1.22	1.25	1.25	1.23	1.23	1.21	
Other mixed	1.29*	1.30*	1.32*	1.27*	1.25*	1.22	Disappear
Indian	1.19*	1.22*	1.30*	1.29*	1.29*	1.27*	3rd Highest
Pakistani	1.17*	1.23*	1.28*	1.17*	1.14*	1.14*	6th Highest
Bangladeshi	1.26*	1.37*	1.41*	1.28*	1.25*	1.21*	5th Highest
Chinese	0.91	0.94	0.93	0.98	0.96	0.94	
Other Asian	1.1	1.11	1.16*	1.14*	1.12	1.09	
Black African	1.15*	1.15*	1.14*	1.20*	1.15*	1.11*	7th Highest
Black Caribbean	1.18*	1.14*	1.09	1.03	1.02	0.99	Disappear
Other Black	1.39*	1.36*	1.34	1.35	1.31	1.27	Disappear
Arab	1.32*	1.41*	1.43*	1.38*	1.34*	1.30*	2nd Highest
Others	1.18*	1.19*	1.21*	1.19*	1.16*	1.12	Disappear
Number of groups significantly different from White British	12	11	10	11	9	7	

Adjusted High Happy Rating Odds Ratio for Ethnic Minority Groups

Ethnic Groups	Happy						Inferences
	M1	M2	M3	M4	M5	M6	
White British	1	1	1	1	1	1	
White Irish	1.07	0.92	0.94	0.95	0.96	0.98	
Gypsy/Irish traveller	0.38*	0.29*	0.31*	0.36*	0.37*	0.37*	1st Lowest
Other White	1.02	1.08	1.03	1.01	1.01	1.02	
White & Black Caribbean	0.78*	0.72*	0.78*	0.81*	0.83	0.84	Disappear
White & Black African	0.83	1.09	1.15	1.17	1.21	1.23	
White and Asian	0.76*	0.72*	0.71*	0.72*	0.72*	0.74*	2nd Lowest
Other mixed	0.88	1.03	1.03	1.07	1.09	1.11	
Indian	1.09*	1.04	0.93*	0.97	0.97	0.99	Disappear
Pakistani	0.91	0.88*	0.78*	0.88*	0.87*	0.89*	6th Lowest
Bangladeshi	0.94	1.01	0.92	1.06	1.08	1.12	
Chinese	0.88	1.05	1.02	1.03	1.01	1.02	
Other Asian	1.1	1.1	0.99	1.04	1.05	1.07	
Black African	0.90*	0.85*	0.86*	0.83*	0.86*	0.88*	5th Lowest
Black Caribbean	0.81*	0.68*	0.75*	0.80*	0.83*	0.86*	4th Lowest
Other Black	0.74	0.78	0.84	0.85	0.88	0.9	
Arab	0.84	0.79*	0.74*	0.79*	0.78*	0.80*	3rd Lowest
Others	1	1.01	0.97	1.01	1.02	1.04	
Number of groups significantly different from White British	6	7	8	7	6	6	

Adjusted High Life Satisfaction Rating Odds Ratio for Ethnic Minority Groups

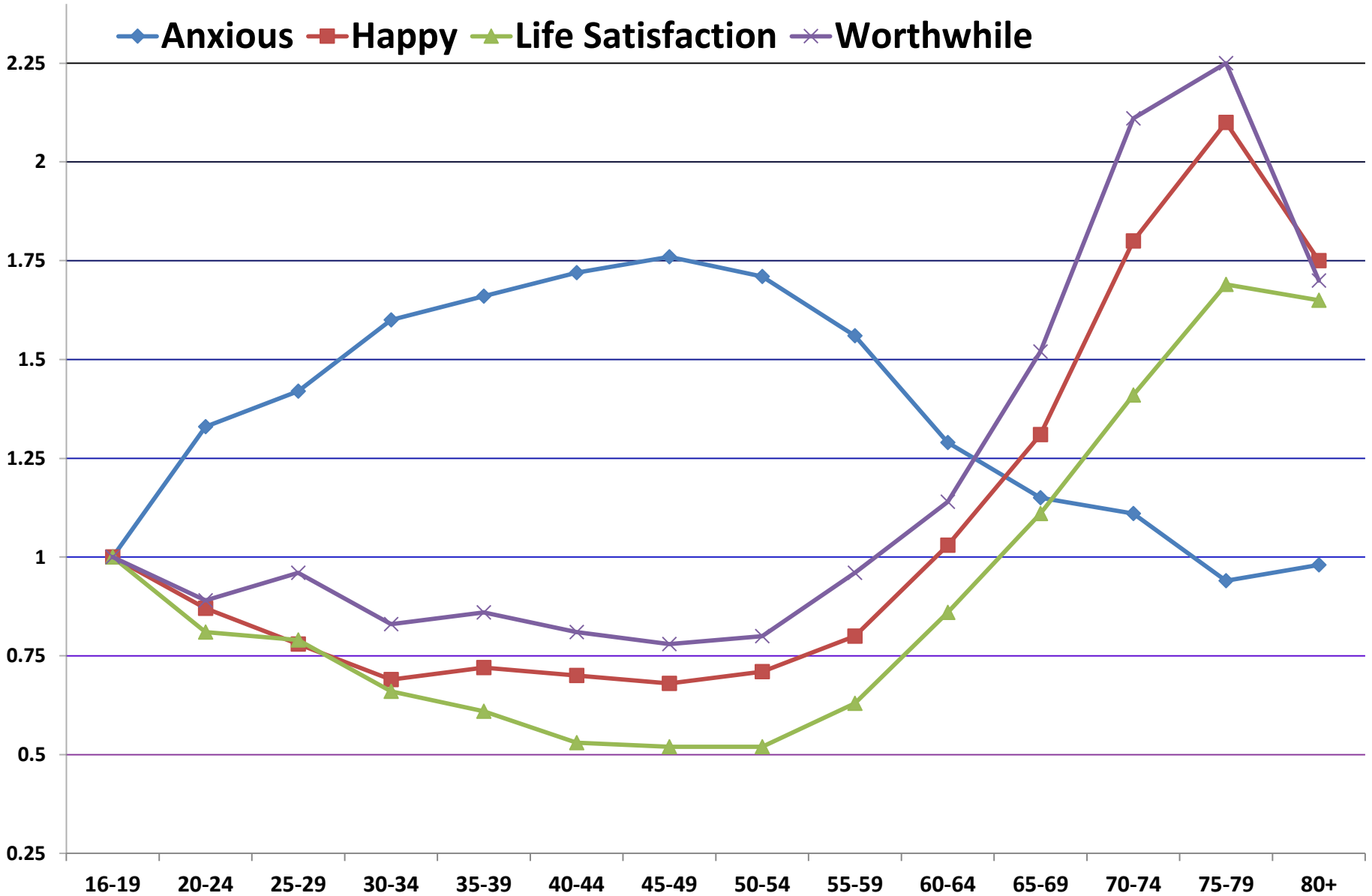
Ethnic Groups	Life Satisfaction						Inferences
	M1	M2	M3	M4	M5	M6	
White British	1	1	1	1	1	1	
White Irish	1.16*	0.99	1.00	1.03	1.04	1.08	Disappear
Gypsy/Irish traveller	0.51	0.48*	0.53*	0.73	0.76	0.76	Disappear
Other White	0.84*	0.96	0.86*	0.83*	0.88*	0.90*	11th Lowest
White & Black Caribbean	0.72*	0.61*	0.71*	0.74*	0.79*	0.81*	10th Lowest
White & Black African	0.87	0.83	0.85	0.87	0.96	0.99	
White and Asian	0.54*	0.61*	0.57*	0.57*	0.56*	0.57*	2nd Lowest
Other mixed	0.99	0.83	0.80*	0.84	0.88	0.91	Disappear
Indian	1.05	0.91*	0.72*	0.73*	0.75*	0.78*	8th Lowest
Pakistani	1.05	0.73*	0.59*	0.66*	0.70*	0.72*	7th Lowest
Bangladeshi	0.96	0.58*	0.47*	0.54*	0.59*	0.63*	5th Lowest
Chinese	0.62*	0.88	0.73*	0.72*	0.70*	0.71	Disappear
Other Asian	1.06	0.95	0.77*	0.79*	0.86*	0.90	Disappear
Black African	0.73*	0.50*	0.47*	0.42*	0.49*	0.52*	1st Lowest
Black Caribbean	0.53*	0.48*	0.54*	0.57*	0.62*	0.66*	6th Lowest
Other Black	0.79	0.51*	0.53*	0.51*	0.56*	0.59*	4th Lowest
Arab	0.98	0.61*	0.51*	0.53*	0.56*	0.59*	3rd Lowest
Others	0.86*	0.78*	0.68*	0.69*	0.76*	0.79*	9th Lowest
Number of groups significantly different from White British	8	11	15	13	13	11	

Adjusted High Worthwhile Rating Odds Ratio for Ethnic Minority Groups

Ethnic Groups	Worthwhile						Inferences
	M1	M2	M3	M4	M5	M6	
White British	1	1	1	1	1	1	
White Irish	1.06	1.06	0.98	1.01	1.01	1.06	
Gypsy/Irish traveller	0.57	0.57	0.50*	0.65	0.69	0.70	Disappear
Other White	0.86*	0.86*	0.83*	0.81*	0.88*	0.93*	12th Lowest
White & Black Caribbean	0.77*	0.77*	0.86	0.90	0.93	0.97	Disappear
White & Black African	0.78	0.78	0.70*	0.70	0.74	0.77	Disappear
White and Asian	0.80	0.80	0.67*	0.67*	0.66*	0.69*	3rd Lowest
Other mixed	1.22	1.22	1.06	1.11	1.15	1.21	
Indian	0.91*	0.91*	0.75*	0.77*	0.81*	0.86*	9th Lowest
Pakistani	0.84*	0.84*	0.56*	0.63*	0.66*	0.69*	2nd Lowest
Bangladeshi	0.84*	0.84*	0.53*	0.59*	0.65*	0.71*	4th Lowest
Chinese	0.59*	0.59*	0.67*	0.66*	0.66*	0.69*	1st Lowest
Other Asian	0.98	0.98	0.70*	0.72*	0.79*	0.85*	8th Lowest
Black African	0.89	0.89	0.68*	0.64*	0.72*	0.78*	6th Lowest
Black Caribbean	0.81*	0.81*	0.73*	0.77*	0.81*	0.89*	11th Lowest
Other Black	1.21	1.21	0.77	0.77	0.83	0.89*	10th Lowest
Arab	0.97	0.97	0.69*	0.73*	0.77*	0.82*	7th Lowest
Others	0.83*	0.83*	0.63*	0.64*	0.70*	0.75*	5th Lowest
Number of groups significantly different from White British	8	8	13	11	11	12	

Life-cycle effects on wellbeing

(Odds Ratio after adjusting for All Variables)



Adjusted Wellbeing by Broad Ethnic Groups and Region (Odds Ratio - Compared to London)

Wellbeing	White	Asian	Black
Anxious	Lower in All regions (except North East, North West)	Lower in W Midlands, East of England, South East	Lower in North East, Yorkshire, East of England
Happy	Higher North West, E Midlands, East of England, South East, South West	Higher in Yorkshire, East of England, South East	None significant
Life Satisfaction	Higher in all regions (except W Midlands)	Higher Yorkshire, E Midlands	None significant
Worthwhile	Higher in All regions	Higher in all regions (except W Midlands)	Higher in Yorkshire, Lower in W Midlands

Conclusion (1)

- Most BME have reported lower wellbeing than White people.
- After adjustment for demographic, social, health, economic and contextual factors, wellbeing among BME continued to remain lower than White British.
- Health is the key determinant of quality of life for all ethnic groups. Smokers have most negative experience. People with chronic conditions have positive experience (but are relatively anxious).
- Stage in life cycle is important – older people feel life has been worthwhile
- Economic conditions influence QoL. Less economically successful groups (mainly BME) have lower quality of life scores?
- After health status and demographics, Ethnicity is key determinant of Life Satisfaction and Worthwhile whereas Deprivation is the least
- Fewer determinants of wellbeing in Black and Asian ethnicity compared to White (their rankings also differs)

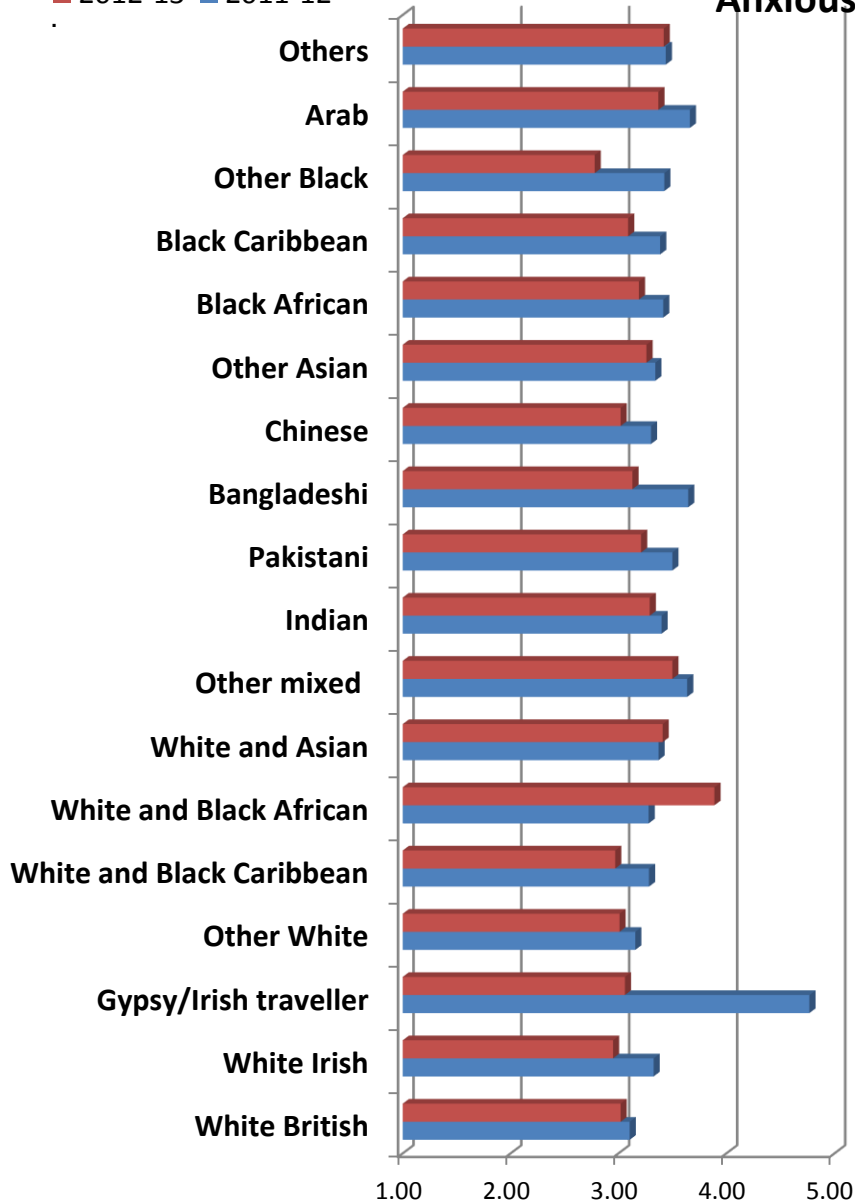
Conclusion (2)

- Residents of London (followed by W. Midlands) are less happy, more anxious, lower worthwhile scores and have lower life satisfaction than other regions (after controlling for other variables in regressions).
- Whereas South East residents display some of the highest scores on wellbeing.
- Black-African people have low satisfaction. Perhaps because many arrived as asylum-seekers and other have not had work consistent with qualifications?
- Recent migrants have higher satisfaction. Why do those who arrived from the 1960s to 1990s have lower scores on QoL?
- Chinese people have low scores on worthwhile, even though their scores on other measures are more positive.
- Overall QoL has not changed between 2011/12 and 2012/13, so does differential by ethnic groups, but Gypsy/Irish traveller, Black have shown some improvement (which needs statistical testing).

Mean Anxious and Happy Ratings, England, 2011-12 and 2012-13

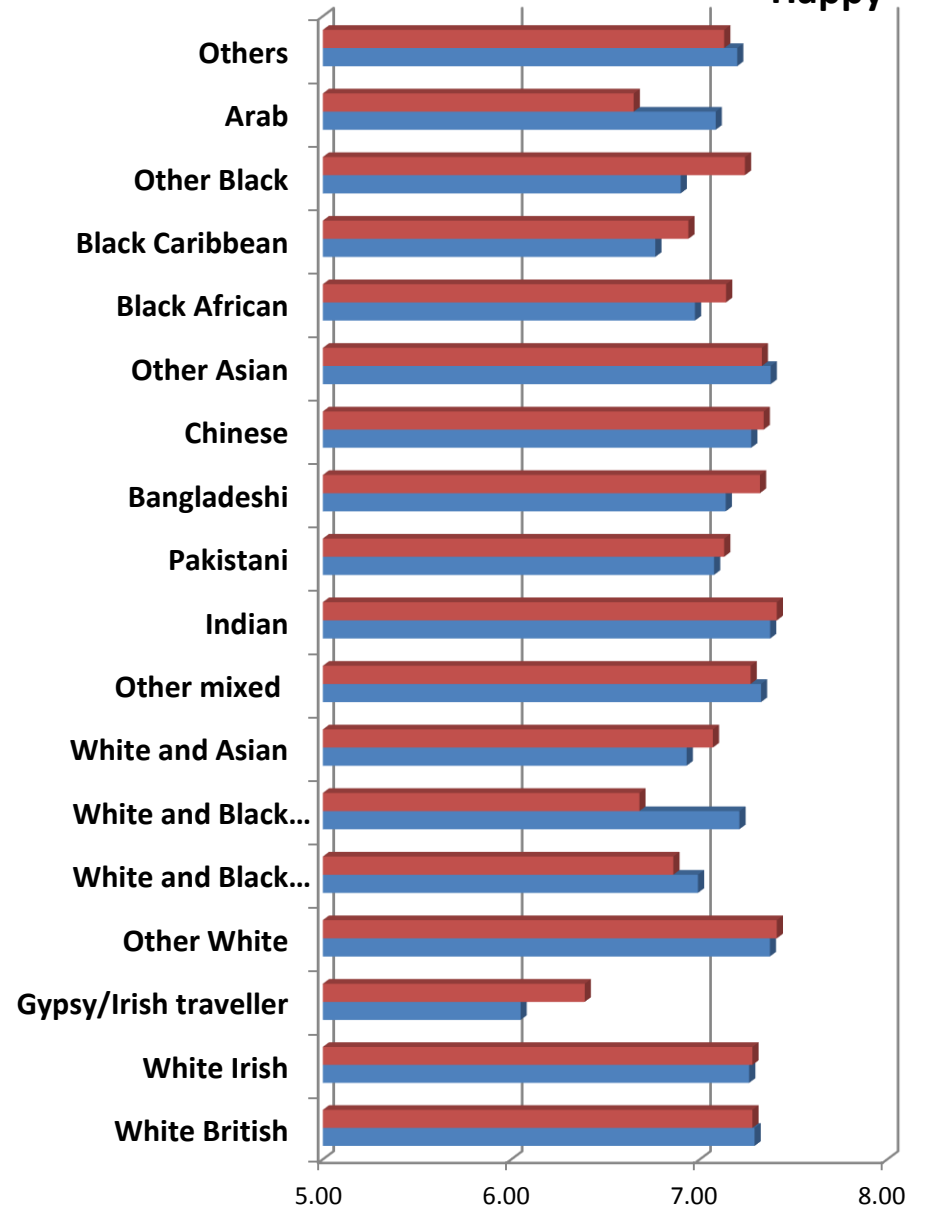
■ 2012-13 ■ 2011-12

Anxious

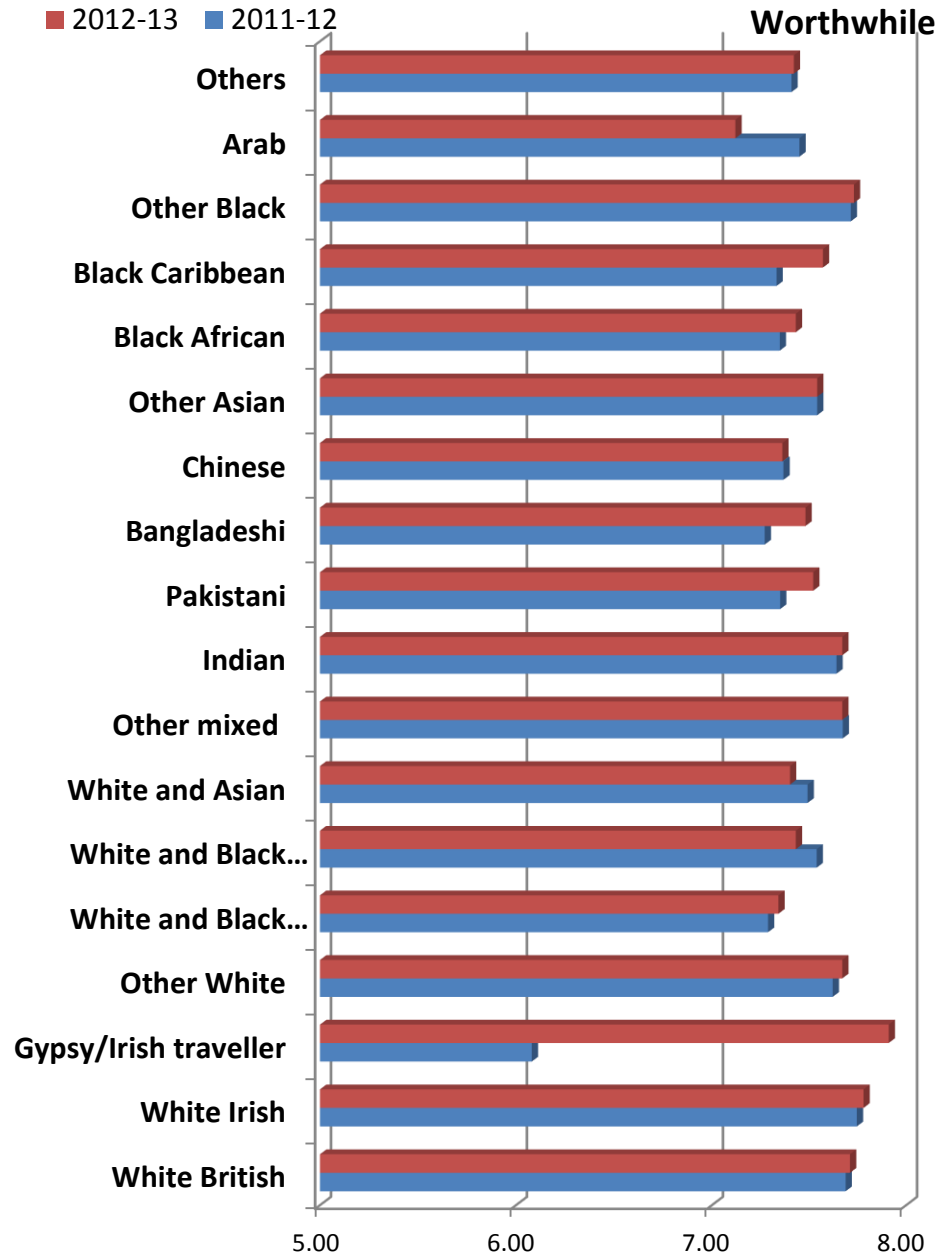
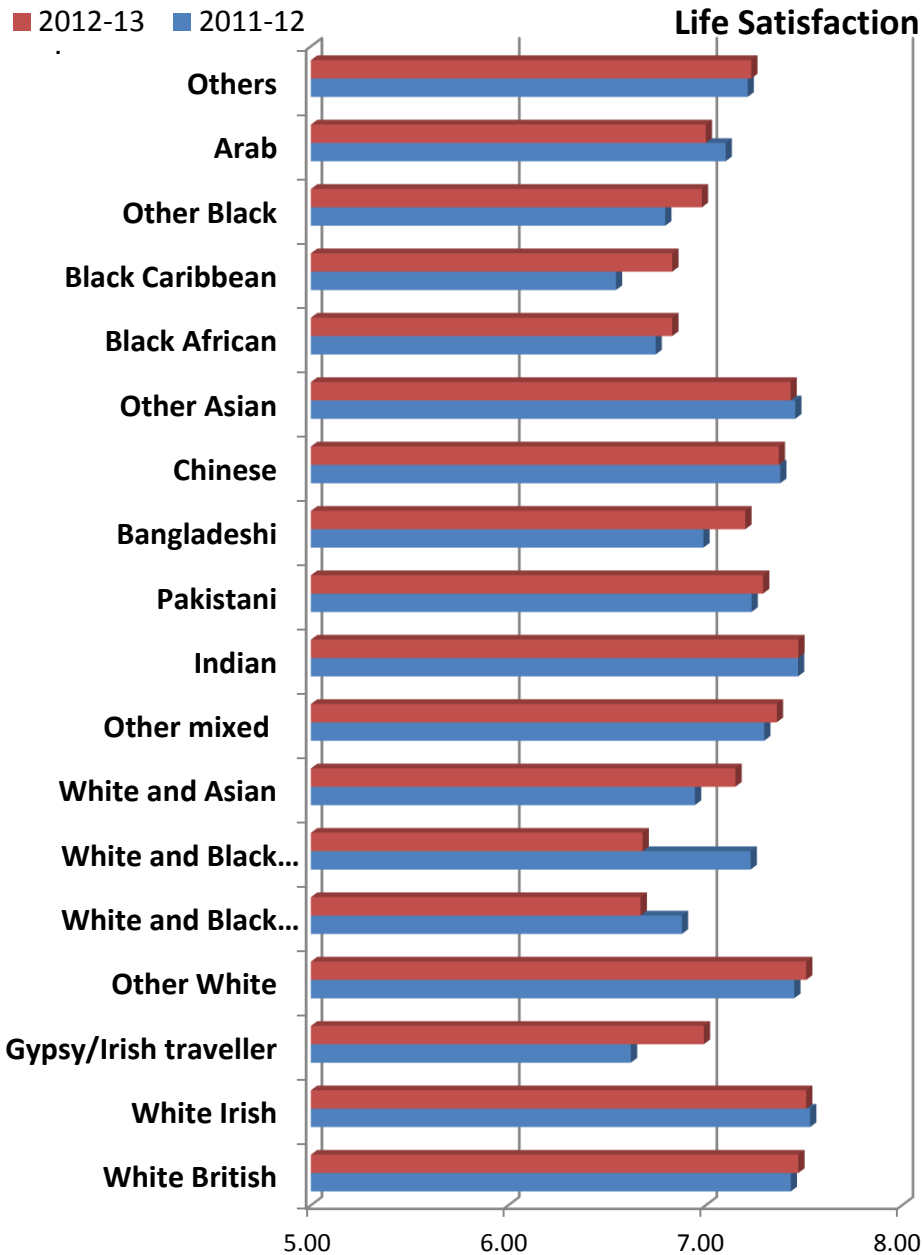


■ 2012-13 ■ 2011-12

Happy



Mean Life Satisfaction and Worthwhile Ratings, England, 2011-12 and 2012-13

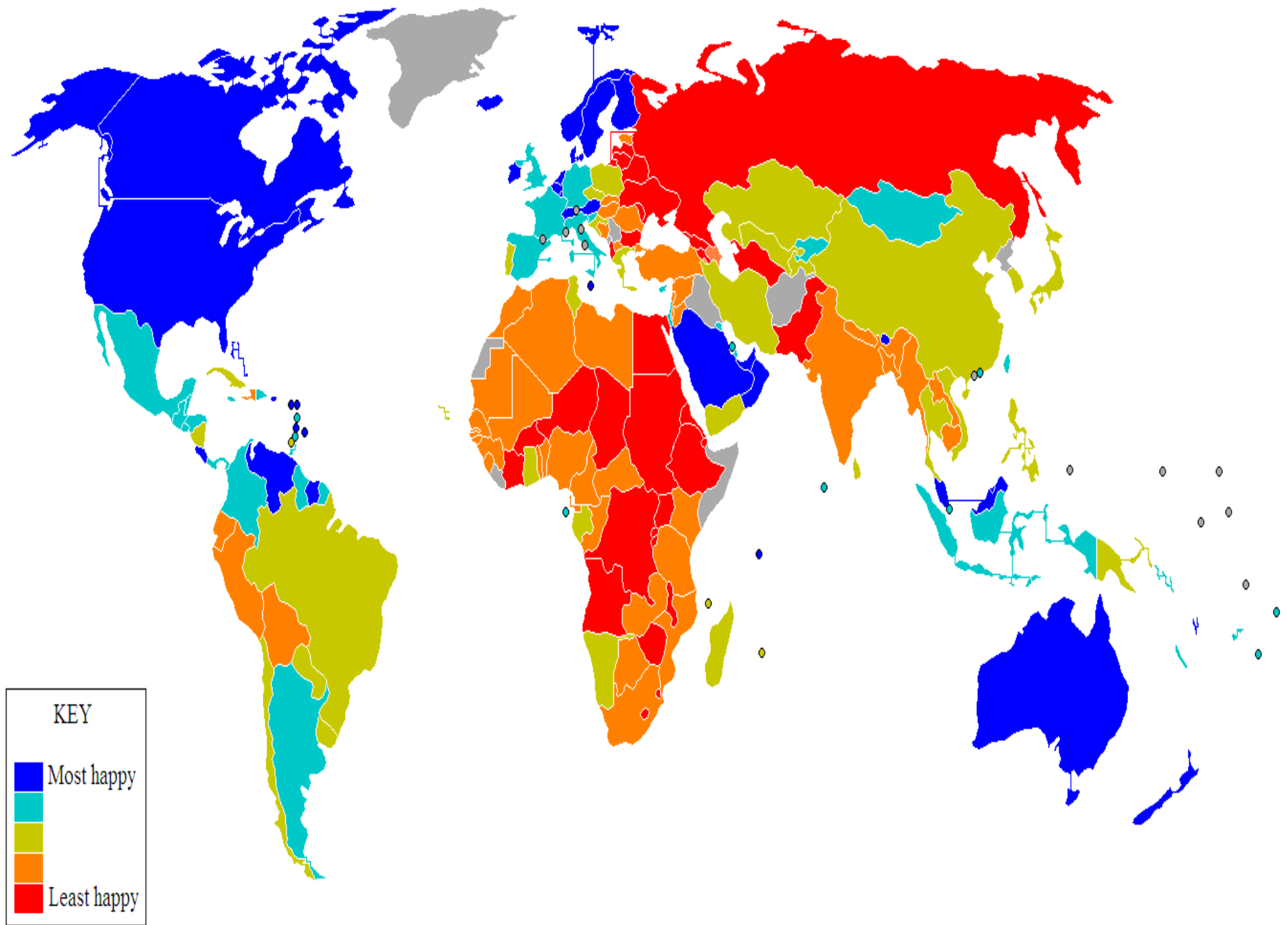


Limitations

- Regression Results covered only England due to no access to SOA codes for Wales, Scotland and Northern Ireland.
 - **However England covers 84% of UK population & 96% of BME**
- Multivariate analysis is required to confirm changes in wellbeing between 2011/12 and 2012/13 by ethnic groups.
- ONS QoL variables do not measure at household or family level which is more appropriate for BME groups.
- ONS Survey is conducted in English Language thus restrict participation of people Who don't know English language.
- Ethnic group classification does not distinguish the 3 Black groups at the UK level.
- Use Carstairs rather than IMD because this enables closer link with neighbourhood (if ONS adds Output Area to SDS data sets).

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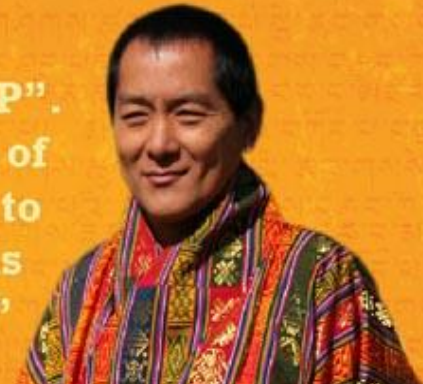
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GROSS NATIONAL HAPPINESS

“GNH is more important than GDP”.
The understanding of what humans need to make them happy is vital to our society.”



Thanks

