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Sport, Capital and Consumption

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Introduction

Scholarly work in the field of cultural consumption has established a clear link between social stratification and cultural consumption. This relationship has been theorised most famously by Bourdieu (1984) and Peterson (1992). It is evident that consumption is still bound up in social hierarchies. However, recent studies in the U.K. found that the cultural field was almost as strongly polarised by other socio-demographic variables as by social class (Gayo-Cal, 2006). There is growing evidence of a multiple axis of this stratification order, which may include ethnicity (DiMaggio and Ostrower, 1990; Tampubolon, 2008), gender, and age (Gayo-Cal 2006). Yet, much of this empirical investigation is encumbered with investigating the arts and music, at the detriment of other important aspects of the cultural field, especially sport. Theoretically sport consumption remains at large underdeveloped. As Warde (2006) identifies, it is a domain of enormous ramifications for economy, culture and society, yet is often treated as second class than many minority arts.

This paper seeks to redress this balance and the aims are threefold. First, to establish if relatively well defined sporting groups are identifiable in the population of study. Second, if sporting lifestyle groups are present, do patterns of consumption relate to the theoretical positions of Peterson and Bourdieu? This considers the question of the relationship sports consumption has with social position and education attainment. Third, in addition to these stratification factors, are sporting preferences structured by other axes of stratification namely, age, gender, and ethnicity? In doing so, I anticipate that to view sporting preferences as only bound up in the stratification order is too simplistic There is now a multiple stratification order in the development of sporting preferences.

The paper is laid out as follows. Section 2 presents the two theoretical positions of Bourdieu and Peterson, and how they bind cultural consumption with the social position and educational attainment. Section 3 briefly describes past research on sporting preferences in

cultural sociology. This is followed by a presentation of research hypothesis, data and methods, in Section 4. The results are presented in Section 5, which is followed in section 6 by a discussion and conclusion.

1. Theoretical positions of cultural consumption

Pierre Bourdieu (1978; 1984), claimed that sporting preferences, in much the same way as preferences for the arts and music, are based on social and cultural reproduction, and class alignment. He claimed that different sports hold different positions in the social and cultural hierarchy. A relationship exists between sporting preference and stratification. Wilson (2002) states that according to Bourdieu (1978; 1984) sports consumption requires the appropriate preferences and tastes as well as skills and knowledge which he terms cultural capital. This capital is unevenly distributed amongst social classes. Those higher in the echelons of society, through a number of social processes, have cultural capital allowing them to appreciate what is classed as 'highbrow' cultural pursuits, or in other words 'legitimate culture' (a phrase coined by Bourdieu) which dominates that consumed by the masses (non-legitimate, vulgar culture). Furthermore, to create distinction these elite show 'aesthetic distancing' to culture of the masses, which they view as vulgar. To that end, cultural consumption is on elite to mass lines. Certain types of sporting activities such as the golf, racket sports, water and winter sports (classified as highbrow or legitimate culture) would be consecrated among those in the higher classes, whilst others, such as football, tenpin bowling and weightlifting, would be avoided through association with the masses.

Bourdieu's framework works on the premise that participation in cultural activities and a penchant for cultural tastes is rooted in the theory of social and cultural reproduction. It allows those in higher classes to remain dominant and shapes their individual life chances. The fundamental element to this theory in the cultural field is that those higher in the echelons of society, through a number of social processes, have cultural capital which allows them to appreciate what is classed as highbrow cultural pursuits, or in other words legitimate culture

(to coin Bourdieu) which dominates that consumed by the masses (non-legitimate, vulgar culture). To that end, they reject pursuits deemed unworthy in the habitus. Habitus here is defined as a set of dispositions that are inculcated in the family but manifest themselves in different ways in each individual. Holt (1998) argues that things which are seen as desirable in a field, such as arts and museum participation - these being of the cultural field - are naturalised and mystified in the habitus of tastes and consumption practices. Bourdieu (1984) also claims that cultural consumption is strongly related to the socio-economic and cultural characteristics of an individual and their family of origin, and that the family passes on cultural resources required for cultural consumption from one generation to the next (for more details see Van Eijck, 1999). This allows the status position to be reproduced in the next generation, continuing the cycle; and ensuring the individual's position in the stratification order is restored. This cultural intelligence (capital) enhances life chances by converting this capital into educational qualifications (institutionalised cultural capital), social and economic capital and ultimately, prospects for upward and economic mobility in later life (DiMaggio and Useem 1978).

Bourdieu's theory centres on the concept of homology between culture and the stratification order, that highbrow culture is intertwined with the upper social class: both what an individual is born into; and the economic position they hold in the future. That is, cultural capital and social standing is inextricably linked. There is a homology between social stratification and the cultural hierarchy. Indeed, Gayo-Cal (2006) identifies that Bourdieu rarely distinguishes social class and cultural capital; he uses cultural capital as one of the criteria to define social class. DiMaggio and Useem (1978), Matty (2004), and Tampubolon (2007a) concur that social class is key to understanding what type of individuals frequent high cultural events. Theoretically, the interpretation of why there should be disparities in cultural participation by social class is embedded in notions of hierarchy, class politics and symbolic identification. DiMaggio and Useem (1978) argue that highbrow cultural participation is important within the class hierarchy, whereby visiting museums, theatre, ballet etc. and gaining cultural

credentials are important in class alignment. Alternatively, participation in these activities can be looked at as a symbolic lifestyle identifier and important in developing social networks with those of similar ilk who can further advance an individual up the class hierarchy. Cultural capital becomes a function for the upper class and upper middle-class to accumulate wider social capital. That is, they gain access to the materially privileged, provided either directly during participation, or indirectly through identification of social equals, given their capacity for conversation about particular cultural items (Warde et al., 2000).

More recently, cultural stratification mapping straightforwardly onto social stratification, as Bourdieu suggests, has been challenged. One theory that grew out of the work of Bourdieu in the early 1990's was the cultural omnivore-univore theory coined by Peterson (1992). Although highlighting that those higher in the social order do consume more highbrow culture, just as Bourdieu suggests, Peterson stressed that these individuals consume more of every form of cultural activity, even the popularised forms. And they are contrasted against a univore group who consume only the popularised forms. Peterson and Kern (1996) claim tentatively that omnivoral behaviour is antithetical to the snobbishness proposed by Bourdieu, which is essentially a set of behaviours based on ridged rules of exclusion. That is, omnivores have an openness to appreciate everything. However, this does not imply an indifference to distinctions; for the cultural omnivores do not embrace lowbrow cultural forms, merely seek to critique in the light of some knowledge of the genre (Warde et al., 2000). Therefore, as claimed by both Chan and Goldthorpe (2005, 2007a) and Warde et al (2000), this revisionist view of cultural theory offers a middle way between Bourdieu's framework, based on homology, social prestige, distinction, and symbolic violence, with a postmodernist position which denies the existence of any hierarchy of cultural forms or items and any socio-demographic determination of lifestyle patterns.

The cultural omnivore-univore thesis is often interpreted in different ways. Some scholars are more inclined to interpret this shift more towards that of self realisation and a postmodernist

approach, of which Peterson himself is an advocate (Peterson and Kern, 1996; Peterson and Simkus, 1992; Chan and Goldthorpe, 2005, 2007a), while others place it more towards a Bourdieusian model (Erikson, 1996). Warde et al (2000) identify three such interpretations of omnivoreness. First, distinctions through culture are rapidly diminishing, somewhat harmless, and that appreciation of a range of culture is broadening, unevenly, replacing snobbish attitudes with a comparatively benevolent and tolerant pluralism (Peterson and Kern, 1996). Second, that omnivoral behaviour is itself exclusionary, a form of cultural symbolism, perhaps exhibiting a qualified tolerance and a cosmopolitan attitude, but with significant if residual, class basis (Bryson, 1996). Third, that omnivorism is used as an instrument which directly, but very selectively, reinforces class inequalities, essentially as a result of a capacity to transform cultural capital into social capital (Erikson, 1996; Warde et al., 2000). To that end, there are three distinct ways of examining omnivores, but empirical investigation more often than not follows the lead taken by Peterson and Kern, and Bryson.

In theorising cultural omnivorousness, Peterson and Kern (1996) stress that its emergence may suggest the formation of new rules governing symbolic boundaries. Those in the higher classes, through differing media channels, modernisation in society and increasingly diverse social networks, are provided with the tools to develop aesthetic understanding of different genres of cultural participation, allowing them to critique it in relation to knowledge assembled, and thus allowing an omnivorousness nature to develop (Peterson and Kern 1996). Chan and Goldthorpe (2007a) argue that, in contrast to the cultural capital theory, cultural omnivore consumption is concerned with self-realisation rather than creating symbolic violence. However, Sintas and Alvarez (2002) claim that being a cultural omnivore is itself elitist. Those in higher echelons of society consume vast amounts of culture compared to those in the lower levels of the social order. Therefore, the mapping of cultural onto social stratification is understood in a more sophisticated way but cultural consumption is still seen as central in creating symbolic boundaries, status rivalry and competition, between those at

different societal levels. (Sintas and Alverez, 2002). Chan and Goldthorpe (2007a) although claiming that stratification is important, state that omnivorous behaviour is a product of self-realisation and a growing political and cultural tolerance to other people's culture. Indeed, they claim that there is little to suggest that there is social cultural elite who express a new aesthetic that is not constrained in conventional ideas of cultural levels. That is, Chan and Goldthorpe (2007a) favour a self-realisation theory of behaviour of omnivores rather than that of status competition, the cultural elite are now open and expressive towards cultures of other groups. That is, the status order can still be discerned, but appears less sharply demarcated than previously. Chan and Goldthorpe further claim that the connection between status and cultural consumption is weakening, as the western world becomes more democratic and culturally and politically tolerant.

2. Empirical investigation of sporting consumption

As identified theoretically sport consumption remains at large underdeveloped, especially in relation to empirical quantitative research. Yet, as Warde (2006) identifies, Bourdieu did recognise the importance of sport and body maintenance in the accumulation and display of cultural capital. Bourdieu identified that sporting preferences help to constitute symbolically distinguished lifestyles (Warde, 2006). However, much scholarly work in the cultural field has neglected the role sport in class reproduction, and whether sporting lifestyles are now on omnivore to univore lines rather than elite to mass.

One of the few quantitative studies examining the sociology of sport in the UK context, was delivered by Warde (2006), in his paper '*Cultural Capital and the Place of Sport*'. Warde found that sport was significant symbolically. Education and social position were important, although in terms of social position, it was not as marked as suggested by Bourdieu. What Warde (2006) did find was that the most privileged had preferences for rare sports, and that the exercised body remains a component of social classification. In addition, White and

Wilson (1999) found that there were positive relationships between social position and attending sports events. Furthermore, Wilson (2002) in his study of the 'paradox of social class and sports involvement' gave support to Bourdieu's framework, finding that those richest in cultural capital are most likely to be involved in sports generally, but those richest in cultural capital were least likely to be involved in sports associated with the masses. Wilson (2002) claims that in relation to the omnivore-univore argument his work parallels the view taken by Bryson (1996), that those richest in cultural capital have breadth and depth of sports preferences consistent with the cultural omnivore thesis. Yet, those richest in capital show aesthetic distancing to popularised sports, suggesting limits to omnivoral behaviour among the elite.

Unlike other domains of the cultural field (i.e. visual arts; theatre and dance; music), sporting preferences are perhaps more likely to be structured through other socio-demographic indicators, alongside the more established stratification measures, namely education and social position. Although Bourdieu paid little attention to age, gender, or ethnicity in his theoretical model, these variables are likely to be key conditioners for lifestyle formation in sport. Indeed, Warde (2006) established that patterns of participation in sport in England were saliently measured by gender, and ethic and age groups, although it was gender that mattered most. Additionally, Sturgis and Jackson (2003) identified that alongside economic capital, social position and education, age and gender were consistent and powerful predictors of sporting activity. In sport therefore, we would expect to reaffirm Gayo-Cal's (2006) position of polarising of sporting preferences by other socio-demographic variables as than by social class.

3. Hypothesis, data and methods

4.1. Hypothesis

The purpose of this paper is threefold. Initially, the aim is to examine if typologies of sporting lifestyles exist. If so, the following aim is to establish where sport is positioned in theoretical assumptions of cultural theory. This paper makes use of advanced empirical modelling (MIMIC), for the first time in the cultural literature, examining sporting behaviour in England, with the most advanced dataset of its kind in England, thereby allowing examination of the appropriateness of Bourdieu's or Peterson's theoretical frameworks for sport. This aim revolves around establishing if there is a relationship between sporting preferences, social position and education. The final aim, tests whether a multiple axes of stratification that cross-cuts the link between class, education and participation exists. That is, does age, gender, ethnicity, and region, significantly influence and alter sporting behaviour even after controlling from class and education.

Here the expectation is, given recent scholarly evidence (Warde, 2006), that the traditional social order remains a significant stratification measure of sporting activity. However, the modelling approach allows us to incorporate other socio-demographic information into the cultural literature (even when controlling for social position and education), and model their relative importance on participation.

The hypotheses are:

H1 – There are relatively well defined types of sporting consumer in the population of study. That is, underlying the various patterns of sporting participation are relatively well defined types of consumers that can be placed into lifestyle typologies.

H2 – The domain of sport, as in other fields of consumption (see Peterson, 2005), now adheres to the principles laid down by Peterson in his omnivore-univore framework, as opposed to Bourdieu's theoretical framework

H3 – Sporting lifestyle typologies are predominantly structured through social position and education (traditional social order) attainment, as dictated by theoretical frameworks;

H4 – Sport typologies are strongly polarised by other socio-demographic variables as than by social class. That is, to view sporting preferences as only bound up through social position and education too simplistic. There is now a multiple axes of stratification that includes age, gender, ethnicity and region.

4.2. Data

A dearth of quality assured data on cultural participation in the UK has long been noted.[1] *The 2005-2006 Taking Part Survey* (TPS) is the first comprehensive cultural survey carried out in England and subsequently seeks to address these data limitations. The arrival of this dataset permits complex statistical approaches to be carried on cultural data. To that end, it allows great methodological strides to be taken, as the data supports complex modelling, allowing a comprehensive estimation of theoretical positions. The TPS has a robust methodology, critically engaging with the notion of participation and non-participation in cultural activities, across the breath of the cultural space. Cultural data from 28,117 adults via face to face interviews was collected. The survey was delivered throughout 2005-2006. Households were drawn form the post code address file and interviews were conducted with a randomly selected member of each household aged 16 or over, through face to face questionnaire.

The survey asked questions on 53 sporting indictors, whether the respondent had taken part in an activity in the last 12 months (1=Yes, 0= No). For the purpose of this paper 13 sporting indicators were chosen including, swimming (indoor and outdoor), general fitness activity

[1] See Savage et al, 2005, for an extensive review of data limitations in the cultural sector.

(weightlifting; keep fit and aerobics; health, fitness, gym or conditioning activities), cycling, snooker (includes pool), racket sports (tennis; badminton; and squash), tenpin bowling, football, golf, jogging, adventure sports (including orienteering; rambling; hill trekking or backpacking; climbing/mountaineering), winter sports (skiing; ice skating; curling), water sports (rowing; yachting or dingy sailing; canoeing; windsurfing or boardsailing; waterskiing; other water sport), and cricket. These activities were chosen as they represent a wide spectrum of the sporting field, that is, they cross cut the perceived cultural hierarchy. Some indicators are more attached to the masses whilst others are what Bourdieu terms 'legitimate'. This range of indictors, differing in alignment with different classes, will enable testing of theoretical position in the sporting field.

To measure the effect of stratification on cultural consumption, social class and education, are the basis on which stratification is measured in this study. For a measurement of social position, I will use the NS-SEC occupational class measurement. NS-SEC occupational class is a standard measure of occupational class used in the cultural consumption literature. Indeed, Chan and Goldthorpe (2005, 2007a, 2007b), Tampubolon (2007a, 2007b, 2007c, 2007d), Savage (2006), Savage et al (2005), Wright (2006), Warde (2006), and Gayo-Cal (2006), all make use of the NS-SEC variable to measure occupational class. Education in the TPS is coded to the six official National Vocational Qualifications levels, ranging from degree level to no qualifications.

Other important socio-demographic information in the TPS which will be used here include age, gender, ethnicity, and family composition. These will serve as control variables to remove the possibility of any hidden confounding effects with those of class and education. This study seeks to test whether these variables are actually salient measures of cultural lifestyle conditioning, and to that end, they are intended to establish whether there is now a multiple axis of stratification that includes these variables, alongside more traditional processes.

4.3. Modelling approach

Key cultural theorists and applied researchers have been pre-occupied with the assumption that cultural activities are part of the wider cultural makeup of individuals, and that individuals can be grouped on observed patterns of consumption. This paper takes its lead from Peterson, Chan and Goldthorpe, Sintas and Alverez, and Tampubolon, in taking the position that there is a latent structure that accounts for variation in cultural activities, in this case sporting activities. The modelling approach therefore simultaneously uses a latent class analysis and a Multiple Indicator Multiple Cause MIMIC model. A path diagram of the model is presented in Figure 1, where the subscript '*u*' defines a categorical variable of interest (i.e. football participation, swimming etc), the circle encapsulating the '*C*' is an underlying latent class measure (can include 1, 2, 3…n classes), whilst the *'x'* variables are independent control variables (i.e. social class, education).

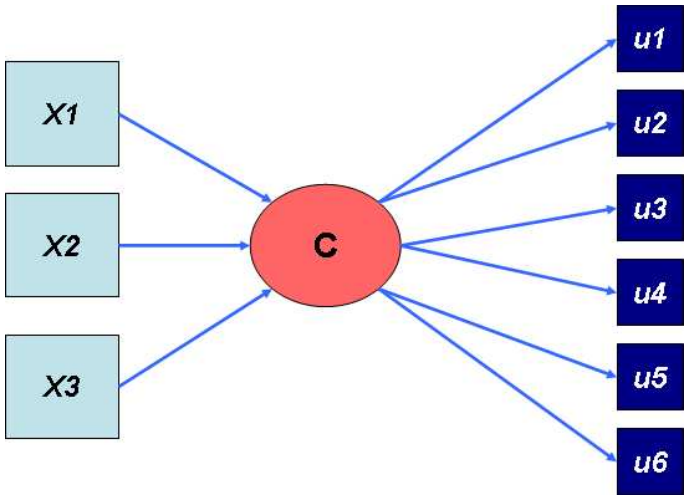
It is critical to understand this model as having two separate types of components: measurement components (latent class analysis), and a structural component (MIMIC).

A latent class model splits the original sample into '*T*' sporting classes such that the original association observed in the sample between sporting indicators is removed from the classes. That is, the observed patterns of sporting activities are assumed to be independent given that latent class membership is taken into account (Sintas and Alvarez, 2002). Thus from a latent class approach, a type of consumer can be revealed whose sporting behaviour will be different to other types of consumers. In other words different typologies of consumers can be formulated based on sporting behaviour of individuals.

Through participation habits in the various sporting indicators, different types of individuals will have different participation habits based on cultural patterning. Individuals use these cultural products to position themselves in the space of lifestyles. Therefore, individuals form

cultural patterns based on consumption of cultural indicators '*u1….u n*', and can thus be assigned to different levels of class 'C'. To that end, types of cultural consumer can be readily identified. Knowing this true variable of interest (latent variable 'C') I can identify cultural lifestyle typologies which allow comparison of Bourdieu's hypothesis of cultural consumers against Peterson's hypothesis of omnivore-univore consumers.

Figure 1 Path diagram - latent class analysis and MIMIC model



Latent Class Analysis usually assumes local independence, and it estimates two essential parameters, latent class probabilities and conditional probabilities. Latent class probabilities and conditional probabilities are important parameters for interpretation of the Latent Class Model. A latent class probability is the probability of an individual being in a particular level (lifestyle typology) of a latent variable (cultural lifestyle) e.g. their probability of being in latent class t = 1, 2…T of latent variable 'C' (Magidson and Vermunt, 2004). Conditional probabilities (akin to factor loading) are the probabilities of an individual in class 't' of the latent variable 'C' being in a particular level of the observed variable (i.e. response to a cultural indicator). For each of the 'T' classes of the latent variable 'C' there is a set of conditional probabilities for each of the observed variables ('u') (McCutcheon, 1987). If a cultural domain has two 'T' classes on the latent variable 'C', then there will be conditional probabilities of them participating and not participating in the identified cultural indicators of

that domain, for each of the two groups. Conditional probabilities provide the measurement structure that defines the latent classes (Magidson and Vermunt, 2004).

The binary responses (1=Yes, 0=No) for the sporting indicators can form a 2 (Yes, No) by n contingency table, where n is the number of indicators of sport (Chan and Goldthorpe, 2005). Here the sport field (with thirteen binary response cultural indicators) give a thirteen-way contingency table with 8,192 (i.e. 2^{13}) cells, within which some degree of association among responses is likely to exist (Chan and Goldthorpe, 2007a). Therefore, underlying this data are relatively well defined types of cultural consumer, who can be placed into lifestyle typologies based on their consumption behaviour (i.e. omnivore, highbrow, lowbrow, univores etc). I can then seek to capture the relationship that exists among the sporting indicators, through a small number of discrete latent classes (Chan and Goldthorpe, 2005).

The second component, a MIMIC model, is a means of adding structure to the fore mentioned, measurement model. In other words, it allows investigation into the relationship between latent class groups and a set of explanatory variables. In its simplest form, a MIMIC model is a simultaneous method of latent class analysis and multinomial regression, or logistic regression when there are only two latent classes. This model has been known and applied in cultural consumption modelling for many years (Sobel, 1983), but has only been recently revived by other scholars (Sintas and Alverez, 2004; and Tampubolon, 2007a, 2007b).

By incorporating stratification variables, age, gender, ethnicity and family composition to the MIMIC model, theoretical positions are challenge and their established linkage with high education and status as separating out cultural lifestyles. Establishing if as Gayo-Cal (2006) claims that there is now a case for a multiple axis of stratification, is true for sport. In other words, while both education and social standing remains core components of cultural lifestyle

formation, the conditioning of these lifestyle groups are increasingly a product of a broad range of social variables including age, gender, and ethnicity.

4. Model results

To begin, Table 1 shows the proportion of respondents in the TPS who consumed the sporting activities identified. Overall participation in sport does not appear to be relatively high, some sports are more likely to be consumed than others, whilst, some sports have restricted participation. It is evident that health and fitness based sports, namely swimming and general fitness based activities are the most favoured sports, 35.2% and 26.7% respectively, whilst cycling is moderately popular (15.7%). However, other sports such as winter sports, water sports and cricket have relatively few patrons, indicative of sports with a limited core group of participants. Sports such as football (10%) and snooker (12.2%) as well as being popular with the lower classes are very much male dominated activities, and have relatively low participation rates.

Table 1
Participation in Sport

Activity	***Percentage***
Swimming	35.2
Fitness	26.7
Cycling	15.7
Snooker	12.1
Rackets	11.4
Tenpin Bowling	10.6
Football	10.0
Golf	8.9
Jogging	7.4
Adventure	5.7
Winter Sports	5.0
Water Sports	4.3
Cricket	3.5

5.1 Latent class analysis (LCA)

It has been identified that underlying these sporting activities are relatively well defined types of sporting consumers. Therefore, to move forward from Table 1, the latent class analysis will establish sporting typologies, based on patterns of these activities. The results of this LCA

model follows. Table 2 presents the Bayesian Information Criteria (BIC) model fit statistic, which along with theoretical underpinnings; acts as guide for selecting the appropriate number of latent classes.

Table 2
Goodness of fit of modelling approach

Level of Latent Variable	***BIC***
One Latent Class	-
Two Latent Classes	216,060
Three Latent Classes	210,560
Four Latent Classes	***207,996***

With the reduction in the BIC as more latent classes are modelled, it is clear that there are different types of consumers based on sporting participation patterns. However, a four class solution was the preferred method here, as within this investigation it was uncovered that as you move beyond a four class solution, the models 'over fit' the data - that is, a four class solution explains the data adequately, irrespective of goodness-of-fit statistics. Further, by increasing the number of classes, each extra class will measure only slight variation in one of the classes identified in a four class model. This offers only further elaboration of one of the classes, and little further interpretation of the model. To that end, a four classes were preferred.

The estimated size of the latent class groups and the estimated conditional probability of consuming each of the thirteen cultural sporting practices, given membership in a latent class group are reported in Table 3. Furthermore, the size of these lifestyle groups is also given. Of the four groups, there is a group that is large in size (59%), a moderately sized group (26%) and two smaller groups (5% and 10%). Indeed, these classes are labelled here, *'inactives'*, *'omnivores'*, '*fitness class'*, and finally a *'traditional class'*.

Inactives

Initially, the first item of note relates to Class Four (not to be confused here with a four class latent model solution) of the LCA model. Indeed, this group consists of marginally less than

three fifths of the respondent population (59%); therefore, it is quite a large proportion. This group is labelled 'inactives'. That is, they participate very little in popularised and legitimate sporting pursuits. Indeed, of all the sporting activities on offer they are only marginally likely to be active in swimming (14%). This group not only rejects high legitimate culture, they also reject popularised sports. They are not univores in the traditional sense (Peterson 1992), who only partake in the popularised sports rather, they are simply inactive. They may be socially excluded and disengaged from sporting and other cultural events. However, although they are not univores in the theoretical sense, they may appear inactive as a result of not identifying their true penchants (i.e. television viewing).[2]

Table 3
LCA Parameters

Relative Size	***Class One*** ***5%***	***Class Two*** ***26%***	***Class Three*** ***10%***	***Class Four*** ***59%***
Typology Label	***Omnivores***	***Fitness Class***	***Traditional***	***Inactive***
Swimming	0.88	0.70	0.43	0.14
Snooker	0.56	0.11	0.45	0.03
Football	0.45	0.04	0.52	0.02
Adventure	0.34	0.15	0.04	0.01
Winter Sports	0.38	0.15	0.04	0.00
Water Sports	0.31	0.12	0.02	0.00
Cycling	0.61	0.30	0.23	0.04
General Fitness	0.72	0.51	0.33	0.10
Golf	0.41	0.08	0.28	0.03
Tenpin Bowling	0.52	0.17	0.24	0.02
Jogging	0.48	0.12	0.13	0.01
Cricket	0.22	0.01	0.20	0.01
Racket Sports	0.71	0.19	0.37	0.02

Omnivores

Class One has a depth and range of sporting preferences. Based on the conditional probabilities (with the exception of football), this group are more likely to partake in all sports at a greater level than any other group. To that end, this group has been labelled 'omnivores'. Put simply, they have the highest propensity of participating in all types of sport. These 'omnivores' are small in size, accounting for only 5% of the respondent population. They follow the pattern laid out by Peterson's theory (1992), whereby they have breadth and depth

[2] When labelling lifestyles one must be conscious that they only relate to the indicators chosen in the LCA model. Here inactives are unlikely to take part in sport, however, they may watch sport on TV, or equally may take part in an activity that is not measured here.

of consumption behaviour, and are voracious in their appetite for all things sporting within this domain. This group are likely to be characterised by high education and occupational class, and are highly engaged in the various cultural activities and events at their disposable. This group are highly distinguishable from their counterparts through their sheer enthusiasm of all things sport.

Fitness Class

Members of this group are selective in their habits. They are not indiscriminate like 'omnivores'; sporting practices are selectively fitness based. This 'fitness class' have a penchant for a broad range of activities that share association with body maintenance. This group are likely participants in swimming, and also have an appetite for cycling and general fitness, and to a lesser extent racket sports. In addition members of this group are more inclined to participate in the legitimate forms of sporting practices, namely, adventure, winter, and water sports, compared to the other groups, with the exception of the 'omnivores'. They appear here at least to distance themselves from the male dominated sports, football, golf and cricket, reflecting that gender may be a salient stratification factor here. Furthermore, they appear to reject sports that most associated with the masses, but they do have exhibit limited omnivoral behaviour.

Traditional Class

The final group labelled here are the 'traditional class', named as they are consumers of the more traditional forms. This group, although having a high propensity to be engaged in various sporting practices, have a limited likelihood of being participants in the more legitimate forms of culture. They are significantly less likely to be engaged in sporting activities compared to 'omnivores'. For example, 88% of those classed as 'omnivores' would be engaged in swimming, compared with 43% of 'traditional class'; furthermore, 71% of 'omnivores' engage with racket sports, while 37% of 'traditional class' engage in these sports. This group shows a distancing to the more legitimate cultural items in this domain. Indeed,

this group are unlikely to take part in, adventure sports, winter, or water sports. That is, they reject the sports with highbrow tones, adhering to sports that are more commonly associated with the working classes. Perhaps reflecting that sporting culture is a dominated culture they seek to maximise positions in their social networks through sporting activities affiliated to their position.

An added nuance however, is that this group have a healthy penchant for the male dominated sports irrespective of legitimacy, namely, football, snooker, cricket, and fitness based activities. Therefore, this group may well be characterised by young males. Furthermore, we can hypothesis that this 'traditional class' and membership of this group, is solidly working class. Indeed, working class individuals with a penchant for sport are likely to seek membership in this group, as they are unlikely due to social processes, to have the breadth and depth of consumption behaviours akin to the 'omnivores' and 'fitness class'. However, this working class group still show signs of omnivorous tendencies that cross cut the stratification of legitimate sports (with the exception of those mentioned), as they partake in golf, racket sports and cricket (which are historically more legitimate forms).

Little evidence points to the existence of a sporting elite in the homology sense, who reject popularised forms of sporting activities (swimming, tenpin bowling, and football etc), at the same time as actively expressing legitimate sporting tastes for golf, cricket, racket, adventure, winter, and water sports. The 'omnivores', the smallest of the latent categories, who by their very engagement across different domains are the true sporting elite, have breadth and depth to their participation rather than a distinctive set of legitimate preferred sports. This sporting lifestyle group have the highest probability of participating in snooker, water sports, golf, cricket, and racket sports (namely tennis, badminton, squash and table tennis), but also of participating in tenpin bowling, and swimming. Far from being elitist in nature, they are omnivorous of the purest kind, which favours Peterson's claim of a change in highbrow tastes, from elitists to omnivores.

Although support is given to an omnivorous framework, there is a deviation away from its true assumptions. Indeed, the 'inactives' reject highbrow sports and reject the most popularised forms. They are not 'univores' as Peterson proclaims in his omnivore-univore thesis. To that end, non-consumers have replaced univores in sport. Evidence also hints at the appearance of more than one kind of omnivore group in their own manner: the *'fitness class'* and the *'traditional class'* are omnivoral, especially where fitness is concerned (Class Two) and particularly the male dominated sports (Class Three). This suggests that these consumer types are simply distinguishing different kinds of omnivorous tendencies, which indicates that there are different kinds of omnivores who are differentiated by yet unmeasured covariates.

A suggestion here is that omnivorous traits are now common in other sections of society not just the realm of the elites. In sport therefore, there is now multiple kinds of omnivore, who are perhaps stratified along social lines their distinction in practices based on sheer weight and range of activities consumed.

5.2 *MIMIC model*

This MIMIC model uses the latent class variables as the dependant variable measured against the explanatory variables identified. It allows us to determine the likelihood or the odds of an individual with a certain characteristic being in a lifestyle category as opposed to another.

Table 4 presents the results of the MIMIC model (odds ratios), with those in bold being significant at the $p < 0.05$ level. Prior to reporting these results, I will describe the layout of the table to allow the reader a better understanding. First, each of the explanatory variables appear on the right-hand side column with the reference category in bold. Then there are a series of columns that contain the odds ratios or exp (b), each comparing a latent class against a reference class. For example the first column compares 'omnivores' against a reference category, 'inactives' here, whereas the final column compares the 'fitness class' against the

reference category ‘traditional class’ and so forth. It is evident glancing through the odds ratios of the various explanatory variables, against the latent class groups, that certain variables are more significant than others. Indeed, in all but one case (the ‘traditional class’ measured against ‘inactives’) occupational class and education are significant indicators. Furthermore, gender, ethnicity, age and interestingly, geographical variation at the Government Office Region (GOR), appear to have significant effects, on individuals forming membership of one latent class, as opposed to another.

Leaving occupational class and educational attainment to one side until later following is an examination of the remaining explanatory variables and their association with latent class types. Within sport participation, females are clearly less likely to be ‘omnivores’, rather than ‘inactives’, but are more likely to be members of the ‘fitness class’ than ‘inactives’. Furthermore, it is evident that females are more likely to be ‘inactives’ and ‘fitness class’ compared to ‘traditional class’, whilst being more likely to be ‘omnivores’ compared to this group (‘traditional class’). This clearly suggests that those that are ‘traditional class’ are males who participate in male dominated supports that to a certain degree exclude women, supporting our research question of the existence of a multiple stratification order.

After examining this gender differentiation in more detail, a clear pattern arises. Sport participation, both by volume and the types of sports each of the four groups consume, is clearly segregated by gender, a factor often ignored within cultural sociology. A male is eight times more likely to be an ‘omnivore’ than an ‘inactive’ compared to females, whilst a female is twice as likely to be a ‘fitness class’ as opposed to an ‘inactive’ than a male. Furthermore, females are sixteen times less likely to be ‘omnivores’ as opposed to members of the ‘fitness class’ contrasted against their male counterparts. This implies that controlling for the other socio-demographic characteristics, there are different types of consumers segregated by gender. Indeed, males who have omnivorous tendencies will be more likely to be ‘omnivores’

whilst women with these tendencies will be less excessive and have a range of sporting tastes, but less volume of participation.

Table 4
MIMIC Model Results for Sport

	O v I	***FC v I***	***TR v I***	***O v FC***	***O v TR***	***TR v FC***
Higher Professional						
Large Employer	**1.66**	1.26	1.42	1.31	1.16	1.13
Lower Prof.	0.86	0.80	1.37	1.08	**0.63**	**1.71**
Intermediate	**0.49**	**0.72**	0.85	**0.69**	**0.58**	1.18
Small Employer	**0.48**	**0.52**	1.08	0.94	**0.45**	**2.09**
Lower Sup. and Technical	**0.30**	**0.46**	0.96	**0.66**	**0.32**	**2.10**
Semi Routine	**0.21**	**0.39**	0.79	**0.54**	**0.27**	**2.02**
Routine	**0.12**	**0.26**	0.72	**0.46**	**0.17**	**2.71**
Never Worked	**0.15**	**0.13**	**0.44**	1.12	**0.33**	**3.38**
Student or Other	0.99	**0.69**	1.34	**1.43**	0.74	**1.95**
Ed Level 4 or 5						
Level 3	**0.66**	**0.77**	1.05	0.85	**0.63**	**1.35**
Level 2	**0.34**	**0.44**	0.86	**0.76**	**0.39**	**1.95**
Level 1	**0.24**	**0.46**	0.96	**0.53**	**0.25**	**2.12**
Other Qualifications	**0.12**	**0.25**	**0.37**	**0.47**	**0.31**	1.52
Never Qualifications	**0.05**	**0.10**	**0.31**	**0.51**	**0.17**	**2.96**
Males						
Female	**0.12**	**2.00**	**0.03**	**0.06**	**3.71**	**0.02**
White						
BME	**0.15**	**0.24**	**0.75**	**0.60**	**0.20**	**3.08**
Middle Age						
Young	**8.59**	**1.80**	**6.23**	**4.77**	**1.38**	**3.46**
Old	**0.04**	**0.23**	**0.12**	**0.17**	**0.31**	**0.53**
Married Children						
Married No children	**0.46**	**0.64**	**0.47**	**0.73**	0.98	**0.74**
Lone Parents	1.27	0.87	1.00	**1.45**	1.28	1.14
Single	**0.56**	**0.44**	**0.53**	**1.25**	1.06	1.19
Separated, Divorced or Widowed	**0.42**	**0.33**	**0.34**	1.28	1.24	1.03
North West						
North East	**2.00**	1.14	1.29	**1.75**	**1.55**	1.13
Yorkshire and Humber	1.24	1.12	1.19	1.11	1.05	1.06
East Midlands	**2.90**	**1.48**	**1.39**	**1.97**	**2.09**	0.94
West Midlands	1.34	0.98	1.28	1.36	1.05	1.30
East of England	**2.62**	**1.33**	1.17	**1.97**	**2.23**	0.89
London	1.25	1.07	1.14	1.17	1.10	1.07
South East	**2.94**	**1.77**	1.17	**1.66**	**2.51**	**0.66**
South West	**2.27**	**1.28**	0.89	**1.77**	**2.55**	**0.69**
Constant	**3.67**	**4.33**	**3.21**	0.85	1.14	**0.74**

The ‘traditional class’ who have been identified as having a penchant for masculine based activities, namely, cricket, football, golf, and snooker, are as one would expect, predominantly male. Indeed, a female is three times more likely to be an ‘omnivore’ than a member of the ‘traditional class’, fifty times more likely to be in the ‘fitness class’ group and

thirty three times more likely to be in the ‘inactive’ group, when compared to males. Therefore, these latent class groups are significantly separated by gender. To summarise the gender effect, it is evident that if females take part in sport they are likely to be ‘fitness class’, whereas males who consume sport are more likely to be ‘omnivores’, but there is also a significant group of males who only consume the masculine types of sports and little else, these making up the ‘traditional class’.

Black and Minority Ethnic (BME) groups are likely to be under-represented in ‘omnivores’ and ‘fitness class’ groups. Indeed, BME’s are clearly less likely than their white counterparts to be ‘omnivores’ rather than ‘inactives’, as are the ‘fitness class’, but are more likely to be members of the ‘traditional class’ than the ‘fitness class’ or ‘omnivores’. If BME’s take part in sport they do so to a lesser extent than their white counterparts and essentially take part in a limited range of masculine based sports. Therefore, female BME groups are likely to be in the main non-participants, whilst male BME groups have limited omnivorous tendencies and participate in a few traditionally male dominated popularised sports such as football, snooker, and cricket. Clearly then BME groups do not share the penchant for sport as their white counterparts, having little omnivore, middlebrow or elitist tendencies.

Young people are evidently more likely than older people to have a range of sporting preferences than to be inactive. Whilst the middle aged (35-54yrs) are more likely to be active compared with the older generations. This is clearly a product of health and the types of sporting activities under investigation here. It is clear that age is an active variable in segmenting individuals into differing latent classes, as is gender. An interesting pattern emerges if one examines the age structure of the latent class, ‘fitness class’ group. Although it is evident that they are relatively young (nearly twice as likely to be young compared to the middle aged, from middlebrow to inactives), they are less likely to be as young as the ‘omnivores’, and an older group compared to ‘traditional class’. One interpretation here is that certain types of young people (possibly affluent well educated) start adult life with a

penchant for all types of sport, they are in essence ‘omnivores’, but as they age they focus on a limited range, or decrease their volume of participation, due to social processes happening in their lives (i.e. marriage, children, less free time etc). As a result, elite omnivore group become fitness class groups as they age. On the other hand, evidence here points to the fact that certain groups (namely, less affluent lower educated) have a limited range of sporting consumption when they are young, but do take part, hence they are ‘traditional class’, and as they age they simply become ‘inactive’.

Of the other socio-demographic variables, evidently, respondents who are married with children are more likely to participate in sport, both in greater depth and volume. Indeed, individuals who are married are more likely to be ‘omnivores’, ‘fitness class’, and in the ‘traditional class’ than ‘inactives’. Furthermore, they are more likely to be ‘fitness class’ than ‘traditional class’, than those married with no children, lone, parents, single, or separated, divorced, or widowed. Also, there is significant variation between GOR and group membership. Being located in England’s North West reduces the chances of an individual being an ‘omnivore’. A further interesting pattern emerges when examining ‘fitness class’, indeed, the results confirm that they are more likely to reside in the East Midlands, East of England and South East and West. What this suggests is that those with greater depth and volume of sport consumption generally reside in the South of England, whilst regions to the North have limited range of sports. To that end, this perhaps opens up a debate on a possible sports divide between North and South of England. Perhaps this divide is a characteristic of schooling and education, with a lack of emphasis on sport and the benefits it brings in a social and health aspect, influencing consumption habits as people age. Typically, it could be the culture of sport in a particular area, or the supply side marketing and other forms of communication from the public and the private sectors. Alternatively, it could be a compositional build up of different types of individuals in certain districts. The region in which an individual resides is likely to determine to some extent the nature and types of sport they consume.

Each of the explanatory variables thus far has been significant indicators of an individual's latent class membership. It is important to determine whether these variables are still the most influential in categorising individuals into types of consumer, or whether these variables are becoming increasingly important in the space of cultural consumption, cross cutting the link between social stratification and cultural consumption. In the context of the MIMIC model, occupational class remains a central indicator of cultural consumption. Indeed, the higher an individual's occupational class the more likely they are to be an 'omnivore' rather than an 'inactive', and an 'omnivore' over a member of the 'traditional class'. Furthermore, individuals with high social positioning have a greater propensity to be 'omnivores' rather than members of the 'fitness class', and 'fitness class' rather than 'traditional class' and 'inactives'. In sum, occupational class clearly has a strong influence on membership of the four latent classes, the higher the occupational class the greater are the odds of them being omnivoral. Higher professionals are six times more likely than those that have never worked to be 'omnivores', rather than 'inactives'. Furthermore, they are eight times more likely than those in routine positions, four times more likely than those with semi routine positions, and two times more likely than small employers and own account workers, and those in intermediate professions. This pattern is very similar when measuring 'omnivores' against the 'fitness class' and 'traditional class'. The 'fitness class' who although have omnivorous tendencies, tend to be limited in their range and consume in less volume than 'omnivores'. When measured against 'inactives', cultural consumption is again stratified along social lines, with the 'fitness class' having a greater probability of being in higher occupational class positions than 'inactives' and 'traditional class'. Indeed, a higher professional is one and half times more likely to be a 'fitness class' than an 'inactive', twice as likely than those with intermediate occupations, small employers and own account workers, lower supervisory and technical occupations, and routine occupations; three times more likely than those with routine positions; and approximately eight times more likely than an individual who has never worked. Further, the chances of being in the 'fitness class' as opposed to the 'traditional class'

are dependent on occupational position. As suggested this 'traditional class' are indicative of the working classes. It can be concluded here that occupational class represents a clear hierarchy with regard to cultural consumption. As one moves from the bottom to the top of the hierarchy the more likely they are to be omnivoral, whilst those lower in the social order are more likely to be less active or non-consumers.

Educational attainment remains a strong indicator of sport consumption. Indeed, along with occupational class it remains the key determinant of a model of cultural participation. The highest educated (level 4/5) have a greater propensity to be 'omnivores' than in the 'fitness class' (although Level 3 is non-significant), 'omnivores' than 'traditional class' and 'inactives', whilst the highest educated have a greater chance of being a 'fitness class' than a member of the 'traditional class' or an 'inactive'. The highest educated are twenty times more likely to be 'omnivores' rather than 'inactives', measured against those with no qualifications; and four times more likely to be omnivores than those with a Level 1 grade; and have almost three times the chance of being omnivores than those with a Level 2 grade. In addition, it is evident from Table 4 that the 'fitness class' have a greater propensity to be highly educated. Indeed, those with a Level 4/5 qualification are twice as likely as those with a Level 1 or 2 grades to be of this latent class rather than 'inactives', and ten times more likely than those with no qualification. Furthermore, the higher educated have a greater propensity to be in the 'fitness class' as opposed to the 'traditional class'. However, 'omnivores' have greater educational attainment levels than 'fitness class', illustrating a clear hierarchical structure of sporting participation based on education attainment.

5. Discussion and conclusions

Through the MIMIC model approach five points come out as significant. First, the model identified four well defined types of sporting groups, differing in breadth and range of sporting behaviours. Second, the patterns of consumption of these groups clearly identified that sporting field adheres more to Peterson's omnivore-univore framework than to the

theoretical principles put forward by Pierre Bourdieu. The most active of the four lifestyle groups, the 'omnivores', are highly educated and of high social standing, yet they are not the elites Bourdieu proclaimed they should be. They consume all types of sporting activities on offer just as Peterson claimed, rather than a limited range of legitimised culture and aesthetic distancing from popularised forms.

However, there are subtle nuances to a clear adaptation of Peterson's theory in the sporting field, one relating to the identification of other active lifestyle groups, and second relating to the univores. The fact that the 'fitness class' and the 'traditional class', both with certain omnivorous tendencies, have been identified, suggests that the sporting field is more complex than theory implies, that different types of omnivores exist. These omnivores are marked as being stratified along social lines. Evidence points to an advancement of omnivorous tastes filtering through the stratification order. Omnivorousness is no longer the distinction of the elites and there is a growing middlebrow as well as lower middle and working class omnivores. The results give weight to being so as evidently the 'traditional class' are the working classes who show signs of omnivoral behaviour and patterning, whilst the 'fitness class' are middle classes with good educational attainment. To that end, one can question whether being more omnivoral is in effect a form of distinction, reproducing and confirming the status order. That is, omnivorism to coin Bryson (1996), is in itself somewhat exclusive, albeit the more omnivoral the more exclusive. Distinction, confirming one's place in the social order and social reproduction, are perhaps best considered in regards to social capital. Indeed, omnivorism may be a pre-requisite to gaining access and remaining in desired social networks. A further nuance arises in relation to the non-participant group. That is, the identified masses with popularised sporting preferences, what Peterson called univores, did not show up. Rather a group of non-participants was identified, characterised by a working class position with low levels of educational attainment. Univores are in the sporting domain of non-consumers. This is consistent with the findings of Tampubolon (2008), albeit in the

music domain. Evidence here in the sport domain, supports the position that the omnivore-univore thesis may need adjusting.

Third, the elite group 'omnivores', and the body maintenance group the 'fitness class', groups with high educational attainment and social standing, are more inclined to adhere to the more legitimate forms of culture. The evidence presented here clearly shifts the omnivorous framework more towards a cultural capital homology position that is it more socially structured than scholars have reported (Chan and Goldthorpe, 2005; 2006; 2007a; Peterson, 1992). It would appear here at least that Peterson's theory is, coining the terms of Chan and Goldthorpe (2007a), 'a more sophisticated approach' in enhancing Bourdieu's theory. This further supports the claim that rather than being a product of greater democracy, tolerance, and self realisation, omnivorism still acts as a marker of distinction.

Fourth, what group an individual resides in is undoubtedly a function of their social standing and educational attainment. Patterning of sporting preferences is still somewhat bound up in the traditional stratification order. The fact that each group appear to be at different positions on the stratification order based on education and social position, that is, the highest educated and strongest social position being accredited to 'omnivores', to a lesser extent by the 'fitness class', then the more working class group of the 'traditional class', and finally the 'inactive, is indicative of a class based cultural system.

Fifth, undoubtedly, the traditional social order (class and education) remains a significant stratification measure of sports participation. Here strong evidence is provided that participation patterns are still somewhat entrenched in social processes. Yet, while social stratification variables remain empirically central to our understanding of cultural behaviour, it is also clear that other factors such as age, gender, ethnicity and region of residence are also significant contributors even when controlling for the stratification variables. Therefore, to

view sporting consumption as only bound up in the stratification order is too simplistic. Age, ethnicity and region make significant contributions to facilitating and conditioning lifestyles created in sport, whilst gender is as powerful a variable in the segmenting of different patterns as educational attainment and social position. The evidence from the models identify that between the groups, males are more likely to be members of the ‘omnivores’ and the ‘traditional class’, whilst females are more likely to be in the ‘fitness class’ and be ‘inactive’, which group they are in is broadly a function of education and social position. This finding provides evidence of a multiple axes of stratification. That is gender, education, and social position contribute significantly to the sport consumption model, and they are significant contributors to conditioning of sporting lifestyle, whilst to some extent other variables are somewhat controlling measures.

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