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ABSTRACT Several studies indicate that musical preferences provide a means of discriminating between social groups, and suggest indirectly that musical preferences should correlate with a variety of different lifestyle choices. In this study, 2532 participants responded to a questionnaire asking them to state their musical preference and also to provide data on various social class-related aspects of their lifestyle (namely travel, personal finances, education, employment, health, and drinking and smoking). Numerous associations existed between musical preference and these aspects of participants' lifestyle. The nature of these associations indicated that liking for 'high-art' music was indicative of a lifestyle of the upper-middle and upper classes, whereas liking for 'low-art' music was indicative of a lifestyle of the lower-middle and lower classes. Issues concerning causality are discussed with reference to the likely complex interaction of numerous factors.

KEYWORDS: *everyday, musical taste, social*

Abundant anecdotal evidence testifies that stereotypes exist concerning the fans of various musical styles. North and Hargreaves (1999) provided some empirical evidence for the existence of such stereotypes concerning fans of chart pop music, alternative pop music, and classical music in a sample of undergraduates and 9–10-year-old children. A second study indicated that being a fan of either chart pop or rap had implications for participants' reactions to another hypothetical person who was also a fan of one of these two musical styles. Specifically, there was a tendency to provide positive evaluations of a hypothetical person who shared the participant's musical preference, and to provide negative evaluations of a hypothetical person who did not share the participant's musical preference.

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Effects such as these have been explained in terms of social identity theory, which argues that such discriminations arise because they allow participants to make their group membership salient and to derive positive self-esteem from this (see e.g. Tarrant et al., 2001). This, and a few other laboratory studies (see review by Tarrant et al., 2002), indicate that musical preference is meaningful in terms of group dynamic processes. However, these studies are unable to show how the function of music as a means of discriminating social groups might manifest itself outside the laboratory, and this function deserves further investigation.

The present article is the third in a series of three concerning how fans of different types of music might also have different lifestyles. The first and second of these papers (North and Hargreaves, 2007a, 2007b) concerned differences in lifestyle based on a putative liberal–conservative dichotomy and membership of ‘high-/low-culture’ preference groups respectively. The present article investigates the extent to which social class can also be used to differentiate musical preference groups. It is possible that the fans of different musical styles might well be differentiated in terms of a range of factors indicative of social class, such as travel, personal finance, education, employment, and health.

Sociological research has made some progress regarding the ‘real world’ status of music as a means of discriminating social groups (see e.g. DeNora, 2000; Frith, 1978, 1981). Specifically, research on ‘taste publics’ and ‘taste cultures’ has had some success in categorizing fans of particular musical styles in terms of sociodemographic variables. These ‘taste publics’ serve to ‘entertain, inform and beautify life and to express values and standards of taste and aesthetics’ (Fox and Wince, 1975: 199), such that they comprise groups of people who subscribe to a particular taste culture (see review in Hargreaves (1986) and discussion in Shepherd (2003)).

Gans (1974), for example, identified five major American taste cultures, which were associated with corresponding taste publics. These ranged along a social class continuum, namely ‘high culture’, ‘upper-middle culture’, ‘lower-middle culture’, ‘low culture’, and ‘quasi-folk low culture’. Gans therefore made an explicit link between different taste cultures and social structure, and in particular stressed the importance of the educational attitudes and values of different socioeconomic groups. Similarly, Fox and Wince (1975) collected demographic data on 767 sociology undergraduates, identifying five taste cultures. The first, ‘jazz/blues’, taste public was associated with an urban background: this manifested itself in strong relationships with hometown size (with membership positively related to size of town), religious preference (with members being predominantly atheists, agnostics and Jews, but not Catholics), and father’s education and occupation (with membership being especially high amongst students whose fathers have a professional position). Membership of the second, ‘popular hits’, taste public was related most strongly to religious preference (with members being predominantly

Catholics, rather than atheists, agnostics or Jews), and to a lesser extent to sex (with members being women rather than men) and age (with membership declining with increasing age). Membership of the third – ‘folk music’ – taste public was most strongly associated with sex (with members being women rather than men), and to a lesser extent with age (with students in their early 20s much more involved than were those of other ages), religious preference (with a high proportion of members being Jews and a low proportion being Catholics), and father’s education and occupation (such that there was a positive relationship between membership and socio-economic status). Membership of the fourth, ‘rock/protest’, taste public was negatively associated with age; members were very likely to be atheist or agnostic, they were likely to come from large cities rather than small towns, and from lower income families. Finally, membership of the ‘country and western’ taste public was related to sex (with members being predominantly men), age (which was positively related to membership), religious preference (which was predominantly Jewish), and father’s education (with membership being greater amongst students with fathers at both extremes of the educational continuum). Fox and Wince regarded these results as support for Gans’s concepts of taste cultures and taste publics, since they represent a diverse pattern of musical tastes in which social class and religious preferences exerted the strongest effects.

Similar findings are reported in DiMaggio and Useem’s (1978) survey of concert attendance in the USA. This showed that only 4 percent of blue-collar workers had attended a symphony orchestra during the past 12 months compared with 14 percent of managerial workers and 18 percent of professionals. Furthermore, attendance at classical music concerts was far more prevalent among participants earning over \$15,000 per year and those with a university education than it was among those who earned less than \$5000 or who had failed to complete high school. Pegg’s (1984) survey of British concert attendance revealed a similar pattern of findings. People from upper-middle and middle classes were far more likely to attend classical music concerts than were others, whereas the audience of folk music concerts comprised predominantly middle- and working-class people (see similar findings by Dixon (1981) and Skipper (1975)).

Findings and theories such as these are perhaps best considered in the context of Marxist approaches to sociology and social psychology. Francès (1967), for example, argued that different works of art are assigned different values and attributes by different social groups, and that individuals tend to conform to these values according to their group memberships. In particular, he proposed that ‘high-art’ forms of culture are associated with higher socioeconomic status, such that working-class people do not identify with them. This approach to the issue has clear parallels with the sociological work reviewed above by DiMaggio and Useem (1978). Their findings were cast in terms of the competition between different social class groups for

dominance and control over resources. Their premise was that the dominant upper- and middle-class groups want to defend and advance their relative standing in the cultural and social hierarchy; and that they do this by regulating people's access to artistic training, their familiarity with the contexts within which different varieties of art works are presented, and so on.

Indeed, distinguished sociologists such as Adorno (1941) argued long ago that different musical forms and languages are a direct product of existing social divisions and structures. Similarly, Bourdieu (1971, 1984) contended that a proper sociology of art requires an investigation of the relations between a piece of art, its producer and the various institutions in the 'field of production' in which cultural goods are created (e.g. conservatories, museum curators, learned societies, other artists, etc.). These institutions legitimize certain works and do not legitimize others, thus creating two respective tiers of high-brow and low-brow art. The former obtains status through endorsement by (supposedly) discerning connoisseurs with access to the field of cultural production. In contrast, the existence of the latter is targeted towards consumption by a large proportion of the population and subsequent financial profit. Individual listeners' own tastes, Bourdieu argued, depend on the extent to which they are members of those bodies that legitimize art and form the field of cultural production. For example, the professional, ruling classes endorse opera and so attend performances, whereas working classes are excluded from the endorsement process and must instead be content with 'low-brow' music designed and marketed for the masses. In short, Bourdieu argued that tastes are determined by social background.

It is therefore unsurprising that sociological research has investigated how taste cultures reflect members' position within the social hierarchy through factors such as their socioeconomic status. Indeed, it is interesting that Bourdieu's distinction between artistic products in general is mirrored by Frith's (1990) work on specifically music. The latter distinguished between a bourgeois taste public (for whom music is a transcendent experience available only to those with the right sort of knowledge and interpretative skills) and a commercial music world (that stresses the financial profitability of music). Note, of course, that 'patterns of legitimation' are constantly changing: when Adorno (1941) analysed the entertainment industry's treatment of jazz and popular music, for example, it made sense to lump these two together under a single heading. This would certainly be invalid today, since most jazz music is regarded by all but the most conservative of commentators as 'serious' rather than 'popular': in some respects at least, it has been 'legitimized'. Nevertheless, it may be possible to take 'snapshots' in particular cultures and at particular points in time that do at least verify the proposed organization of musical taste in terms of socioeconomic factors.

Furthermore, while we would not criticize approaches such as these, we would also add that any fuller understanding of music must also account for the detailed, everyday relationship between the music itself and the

consumers of that music (see e.g. North et al., 2004). In other words, research should address not only the means by which art is produced and legitimized, but also the specific means by which this process manifests itself. Put simply, which *specific* aspects of an individual's social class background allow them to be differentiated from people with other musical tastes? Similarly, it is important to remember that any given artistic product could be analysed as either 'high-brow' or 'low-brow', such that these labels cannot be applied uniquely to particular artistic products or domains. For example, classical music can be evaluated according to a low-brow aesthetic (e.g. CD sales) as well its art symbolic value, and pop music can be evaluated according to its art symbolic value as well as any commercial indicators of success. In short, the distinction between 'high-brow' and 'low-brow' art resides within the evaluator and not within the art work itself. One consequence of this is again that it is important to have a detailed understanding not just of the producers of art, but also of the *users*. Indeed, as Shepherd (2003: 74) argues, the research on taste publics outlined above 'operated only at the level of social groups. Little attention was paid to the social and cultural identities of individuals.' Evidence that the nature of these identities is complex would signal 'the distinct possibility that musical life has always been characterized by complex patterns of cross-fertilization and cultural hybridity' (Shepherd, 2003: 75). Shepherd goes on to cite Cohen's (1991: 6) argument that 'what is particularly lacking in the literature . . . is ethnographic data and micro-sociological detail'. Although a small number of studies have investigated the detailed cultural and lifestyle backgrounds of individual musical movements (e.g. Crafts et al., 1993; Finnegan, 1989; Weinstein, 1991) we are not aware of any attempt to date to compare these micro-social variables between the fans of several musical styles. This is particularly interesting in the present day, given the prevalence of music in everyday life (North et al., 2004) and also the postmodern notion of the fragmentation of culture, which suggests that it may be impossible to distinguish reliable lifestyle differences between social groups.

Given the apparent promise of research along these lines, it is surprising that so little has been carried out subsequent to the initial studies (see Hutchison and Wotring, 1993). It is even possible that several clearly identifiable taste publics no longer exist, such that the research reviewed above is now well outdated. Similarly, since the research was carried out predominantly in North America, it is possible that taste publics do not exist in other cultures within even the western world: increasing globalization in recent years may mean that tastes have become massified (see e.g. Klein, 2000). Most importantly, perhaps, it is particularly disappointing that the researchers in question investigated differences between different taste publics in terms of such a restricted range of broad sociodemographic variables (and predominantly just race, religion, and sex), rather than also addressing micro-social variations between different groups of fans.

If music really is a means of identifying different social groups in the 'real world', it should be possible to quantify a wide variety of correlations between particular musical preferences and various specific lifestyle factors related to socioeconomic variables. Patterns of lifestyle choices might well include health behaviours, patterns of travel, handling of personal finances, education, and employment. These issues were investigated through a questionnaire distributed to 2532 fans of 35 different musical styles. Given the existing research on taste publics and taste cultures, we might expect these patterns of lifestyle choices to centre (to at least some extent) around issues of social class: people who like classical music and other forms of so-called 'high culture' should have lifestyles indicative of higher social class, whereas people who like styles of music associated more with 'low culture' should have lifestyles indicative of lower social class. For example, although a lack of previous research makes it difficult to devise hypotheses confidently, it is possible to speculate that participants who like 'high culture' music may have more cosmopolitan patterns of travel, higher incomes, higher levels of education, be more likely to be employed, and live healthier lifestyles.

Method

Two thousand, five hundred and thirty-two participants (mean age = 36.59 years, SD = 16.03 years) were recruited from a variety of locations in a city in the East Midlands region of the UK. In an attempt to obtain a cross-section of the general public, these locations included a university campus, a city centre shopping mall, a train station, several office complexes, a gas supply company and an employment bureau. Full details of the sample are provided in the 'General Information' section of North and Hargreaves (2007a). All participants responded to a specially devised questionnaire sub-divided into 13 sections labelled 'General information', 'Travel', 'Relationships', 'Living', 'Money', 'Education', 'Employment', 'Health', 'Drinking and Smoking', 'Media', 'Beliefs', 'Crime', and 'Music' respectively. The present article reports those findings derived from the sections concerning travel, money, education, employment and health; it complements North and Hargreaves (2007a), which reports those findings from the sections of the questionnaire concerning relationships, living arrangements, beliefs and crime; and North and Hargreaves (2007b), which reports those findings from sections of the questionnaire concerning media usage, leisure time preferences and patterns of music usage.

The final section of the questionnaire ('Music') included a list of 35 different musical styles (each followed by two exemplar composers/performers). Participants were asked to 'tick one that best describes your current taste in music'. Sixteen of the 35 musical styles were selected by fewer than 50 of the respondents, and were excluded from analyses; these styles were choral music ($n = 34$), 20th-century classical music ($n = 7$), drum

and bass ($n = 38$), world music ($n = 24$), ambient ($n = 21$), baroque ($n = 24$), English folk ($n = 19$), new age/relaxation ($n = 10$), psychedelic rock ($n = 8$), early music ($n = 3$), reggae ($n = 43$), Irish folk ($n = 40$), punk ($n = 35$), electronic ($n = 13$), funk/acid jazz ($n = 47$), and heavy metal ($n = 43$). The musical styles which satisfied this criteria were opera ($n = 61$), country and western ($n = 73$), jazz ($n = 72$), rock ($n = 194$), current chart pop ($n = 133$), R&B ($n = 131$), soul ($n = 105$), classical ($n = 149$), disco ($n = 152$), dance/house ($n = 131$), hip hop/rap ($n = 66$), musicals ($n = 121$), blues ($n = 65$), 1960s pop ($n = 118$), indie ($n = 128$), adult pop/MOR ($n = 156$), DJ-based music ($n = 65$), other pop music styles ($n = 78$), and other musical styles ($n = 64$). In addition to this, a further 61 participants failed to state their preferred musical style or ticked more than one, and these participants' data were also excluded from analyses. This produced a final sample for analysis of 2062 participants. Most items on the questionnaire asked participants to select from several pre-defined response options or to provide a specific number (e.g. the number of people who live in their home). Some items required participants to give a rating on an 11-point Likert scale where 0 represented the low point and 10 represented a correspondingly high rating. Full details of the questionnaire are provided in the 'Results and Discussion' section that follows.

Results and discussion

TRAVEL

Participants were asked to state the number of holidays they took per year both within the UK and abroad both in the present day and as a child. Responses to these four variables were summed for each participant and a one-way ANOVA indicated that differences existed between the groups of fans ($F(18, 1967) = 2.09, p < .01$). Homogenous subsets of means (as indicated by Tukey HSD tests) are presented in Table 1. These indicate that fans of dance/house took significantly more holidays than fans of other musical styles. Participants were also asked to state the number of foreign business trips they had undertaken within the past 12 months, and a one-way ANOVA indicated no significant differences in this variable between the fans of the different musical styles ($F(18, 1986) = 1.01, n.s.$).

MONEY

Participants were asked to state whether or not they owned shares in a company, whether they had more than one bank/building society account, and whether they had a credit card. Each 'yes' response to these three variables was scored as 1 and a total score of access to financial resources was derived for each participant. A one-way ANOVA showed that scores on this variable differed between the groups of fans ($F(18, 2043) = 3.79, p < .001$), and homogenous subsets of means are shown in Table 1. These

TABLE 1 *Homogenous subsets of means of number of holidays taken and access to financial resources*

	Number of holidays				Finance			
	Set 1	Set 2	Set 1	Set 2	Set 3	Set 4	Set 3	Set 4
Other	3.7213							
Musicals	3.9732	3.9732	DJ-based	1.4000				
Country and western	4.1594	4.1594	Hip hop/rap	1.4848	1.4848			
Classical	4.2028	4.2028	Dance/house	1.5344	1.5344	1.5344		
Other pop	4.2987	4.2987	Other	1.5625	1.5625	1.5625	1.5625	1.5625
Blues	4.3016	4.2987	R&B	1.5954	1.5954	1.5954	1.5954	1.5954
Adult pop	4.3974	4.3016	Country and western	1.6575	1.6575	1.6575	1.6575	1.6575
Current chart pop	4.4297	4.3974	Current chart pop	1.6842	1.6842	1.6842	1.6842	1.6842
Rock	4.4492	4.4297	Indie	1.6875	1.6875	1.6875	1.6875	1.6875
1960s pop	4.4783	4.4492	Musicals	1.7521	1.7521	1.7521	1.7521	1.7521
Disco	4.4863	4.4783	Opera	1.7869	1.7869	1.7869	1.7869	1.7869
Indie	4.6220	4.4863	Rock	1.8196	1.8196	1.8196	1.8196	1.8196
Soul	4.6961	4.6220	Soul	1.8286	1.8286	1.8286	1.8286	1.8286
Jazz	4.7681	4.6961	1960s pop	1.8898	1.8898	1.8898	1.8898	1.8898
DJ-based	4.8923	4.7681	Blues	1.9077	1.9077	1.9077	1.9077	1.9077
Opera	5.0727	4.8923	Disco	1.9145	1.9145	1.9145	1.9145	1.9145
R&B	5.4409	5.0727	Jazz	1.9167	1.9167	1.9167	1.9167	1.9167
Hip hop/rap	5.4603	5.4409	Other pop	1.9231	1.9231	1.9231	1.9231	1.9231
Dance/house		5.4603	Classical					
		5.8730	Adult pop					

TABLE 2 *Musical preference by whether the participant supports any charitable causes with volunteer work (%)*

	Does volunteer work
Opera	22 (36.7)
Country and western	17 (23.6)
Jazz	25 (36.2)
Rock	46 (24.3)
Current chart pop	32 (24.8)
R&B	33 (26.2)
Soul	35 (33.7)
Classical	50 (34.5)
Disco	40 (26.7)
Dance/house	33 (25.6)
Hip hop/rap	14 (21.9)
Musicals	41 (34.2)
Blues	20 (31.7)
1960s pop	25 (21.7)
Indie	35 (28.0)
Adult pop	45 (28.8)
DJ-based	20 (31.3)
Other pop	22 (29.3)
Other	16 (26.2)

$\chi^2(18) = 18.98, n.s.$

indicate that fans of DJ-based music, hip hop/rap, and dance/house had the lowest level of access to these financial resources whereas fans of adult pop and classical music had the highest. A χ^2 test showed no significant association ($\chi^2(18) = 18.98, n.s.$) with whether or not the participant supported any charitable causes with voluntary work. The resulting frequencies are shown in Table 2.

In addition to providing this information, participants were also asked to state the percentage of their monthly income that they saved (e.g. in a pension or savings scheme); the percentage of their credit card balance that they typically paid off each month; how many times per year they gave to charity; and they amount they spent on food per person per week within their household. A series of four separate one-way ANOVAs showed that the second and fourth of these four variables gave rise to significant differences between the musical preference groups ($F(18, 1947) = 0.75, n.s.$; $F(18, 1364) = 2.09, p < .01$; $F(18, 1867) = 0.90, n.s.$; and $F(18, 1907) = 1.71, p < .05$ respectively), and homogenous subsets of means (as indicated by Tukey HSD tests) for those variables giving rise to significant results are presented in Table 3. This indicates that the greatest percentage of their credit card balance paid off each month was by fans of opera, 1960s pop, musicals, and classical music, consistent with the higher putative social status of the

TABLE 3 Homogenous subsets of means for the percentage of credit card balance that participants paid off each month, the amount that participants spent on food in their household per person per week (£), and annual household income before tax

	Credit card			Food		Income	
	Set 1	Set 2	Set 3	Set 1	Set 2	Set 1	Set 2
DJ-based	49.12			Other	22.86	Dance/house	23311.13
Hip hop/rap	56.19	56.19		Chart pop	23.55	Country and western	24478.93
R&B	58.27	58.27	58.27	Hip hop/rap	24.85	DJ-based	25778.61
Dance/house	60.99	60.99	60.99	Dance/house	25.63	Chart pop	26261.18
Indie	62.12	62.12	62.12	R&B	25.95	R&B	26525.91
Soul	64.41	64.41	64.41	Indie	26.96	Other pop	27281.72
Blues	65.52	65.52	65.52	Country and western	27.07	Other	27591.89
Other pop	67.36	67.36	67.36	DJ-based	27.17	Indie	27745.33
Adult pop	68.45	68.45	68.45	Disco	27.34	Musicals	28300.00
Other	69.14	69.14	69.14	1960s pop	28.10	Hip hop/rap	29019.23
Chart pop	69.38	69.38	69.38	Rock	28.33	Rock	30622.47
Rock	70.97	70.97	70.97	Other pop	29.01	1960s pop	31073.92
Disco	71.63	71.63	71.63	Blues	29.27	Disco	31640.23
Jazz	72.04	72.04	72.04	Adult pop	29.59	Blues	34885.19
Country and western	72.40	72.40	72.40	Soul	29.89	Adult pop	35916.59
Classical		74.07	74.07	Musicals	31.29	Classical	36184.65
Musicals		75.00	75.00	Classical	31.47	Opera	37537.15
1960s pop		75.06	75.06	Opera	31.93	Jazz	37565.40
Opera			81.38	Jazz	31.94	Soul	41020.27

former and latter. The smallest percentage of the balance paid off each month was by fans of DJ-based music and hip hop/rap, consistent with their putatively lower social status. Table 3 indicates that the highest amount spent on food per person per week within their household was by fans of jazz, opera, classical music, and musicals, and the lowest amount was spent by fans of other musical styles, current chart pop, hip hop/rap, dance/house, and R&B, and this pattern of findings is again consistent with the putative social status of these fans.

Participants were also asked specifically to state their annual household income before tax; and their household disposable income per person per month after bills and other essential outgoings. Two separate one-way ANOVAs showed that only the first of these two variables gave rise to significant differences between the musical preference groups ($F(18, 1386) = 3.38, < .001$; $F(18, 1369) = 0.68, n.s.$ respectively), and homogenous subsets of means (as indicated by Tukey HSD tests) are presented in Table 3. This indicates that the highest incomes were earned by fans of soul, jazz, opera, classical music, and adult pop, and again this is consistent with the higher putative social status of fans of jazz, opera, and classical music. Furthermore, the lowest incomes were earned by fans of dance/house, country and western, DJ-based music, current chart pop, and R&B, consistent with their lower putative social status. Note also that it is much harder for explanations based on social status to account for the present finding that other high earning groups of fans included those of soul and adult pop.

EDUCATION

Three separate χ^2 tests were carried out to investigate any association between participants' musical preferences and three respective aspects of their education. The first test showed a significant association ($\chi^2(18) = 36.79, p < 0.01$) with whether the participant attended a fee-paying school. The second test showed no significant association ($\chi^2(18) = 28.61, n.s.$) with whether the participant had ever represented their school (e.g. in a sports team). The third test showed a significant association ($\chi^2(90) = 250.80, p < 0.001$) with the participants' highest level of educational qualification. The resulting frequencies for those two variables giving rise to significant results are shown in Table 4.

Table 4 indicates that fans of opera and hip hop/rap were most likely to have attended a fee-paying school, and in the case of the latter this is inconsistent with the notion that such schools might be the preserve of those who enjoy high-art music. Fans of country and western, current chart pop, musicals, and adult pop were most likely to have attended a state school. Table 4 indicates that those fans with the greatest proportion of PhD/master's degrees were those of opera, jazz, classical music, and blues, which, with the exception of the latter, is consistent with the higher putative social status of these fans. In contrast, fans of country and western, musicals,

TABLE 4 Musical preference by whether participants attended a fee-paying school; ever represented their school (e.g. in a sports team); and highest level of educational qualification (%)

	Fee-paying school	Represented school	PhD	Master's	Degree	A-level	BTEC/GCSE/O-level	None
Opera	18 (31.0)	42 (68.9)	4 (6.8)	7 (11.9)	16 (27.1)	9 (15.3)	18 (30.5)	5 (8.5)
Country and western	8 (11.1)	41 (57.7)	2 (2.9)	0 (0)	10 (14.5)	15 (21.7)	24 (34.8)	18 (26.1)
Jazz	9 (13.0)	49 (70.0)	4 (5.8)	4 (5.8)	17 (24.6)	25 (36.2)	12 (17.4)	7 (10.1)
Rock	28 (14.7)	141 (74.6)	1 (0.5)	6 (3.2)	39 (20.7)	70 (37.2)	60 (31.9)	12 (6.4)
Current chart pop	13 (10.2)	100 (76.3)	0 (0)	3 (2.3)	25 (19.4)	49 (38.0)	47 (36.4)	5 (3.9)
R&B	24 (18.8)	96 (74.4)	1 (0.8)	7 (5.4)	24 (18.6)	64 (49.6)	32 (24.8)	1 (0.8)
Soul	19 (18.1)	73 (70.9)	2 (1.9)	7 (6.8)	25 (24.3)	34 (33.0)	32 (31.1)	3 (2.9)
Classical	20 (13.9)	86 (62.8)	3 (2.1)	12 (8.5)	36 (25.5)	36 (25.5)	39 (27.7)	15 (10.6)
Disco	19 (12.8)	107 (72.8)	2 (1.4)	2 (1.4)	39 (26.4)	45 (30.4)	47 (31.8)	13 (8.8)
Dance/house	24 (18.8)	94 (73.4)	2 (1.6)	6 (4.7)	24 (18.9)	61 (48.0)	31 (24.4)	3 (2.4)
Hip hop/rap	20 (30.3)	49 (75.4)	1 (1.5)	2 (3.0)	11 (16.7)	34 (51.5)	15 (22.7)	3 (4.5)
Musicals	13 (10.8)	74 (62.2)	1 (0.9)	4 (3.5)	16 (13.9)	35 (30.4)	40 (34.8)	19 (16.5)
Blues	12 (18.8)	43 (69.4)	1 (1.6)	6 (9.5)	11 (17.5)	21 (33.3)	20 (31.7)	4 (6.3)
1960s pop	17 (14.4)	73 (64.6)	1 (0.9)	7 (6.1)	16 (13.9)	25 (21.7)	43 (37.4)	23 (20.0)
Indie	19 (15.0)	97 (77.0)	1 (0.8)	5 (4.0)	31 (25.0)	57 (46.0)	27 (21.8)	3 (2.4)
Adult pop	16 (10.4)	105 (67.7)	3 (2.0)	10 (6.5)	34 (22.2)	32 (20.9)	57 (37.3)	17 (11.1)
DJ-based	13 (20.6)	50 (80.6)	1 (1.6)	1 (1.6)	7 (1.3)	36 (58.1)	15 (24.2)	2 (3.2)
Other pop	12 (15.6)	53 (68.8)	0 (0)	2 (2.7)	15 (20.0)	29 (38.7)	23 (30.7)	6 (8.0)
Other	11 (17.5)	47 (74.6)	0 (0)	2 (3.2)	10 (15.9)	23 (36.5)	17 (27.0)	11 (17.5)

$\chi^2(18) = 36.79, p < 0.01$ $\chi^2(18) = 250.80, p < 0.001$
 $\chi^2(18) = 28.61, n.s.$

TABLE 5 *Musical preference by current employment status; and whether the participant had ever been unemployed for six consecutive months (%)*

	Employed	Unemployed	Retired	In full-time education	Have been unemployed for > 6 months
Opera	34 (55.7)	4 (6.6)	20 (32.8)	3 (4.9)	16 (29.6)
Country and western	44 (61.1)	6 (8.3)	20 (27.8)	2 (2.8)	25 (36.2)
Jazz	49 (70.0)	3 (4.3)	10 (14.3)	8 (11.4)	17 (25.8)
Rock	145 (75.9)	12 (6.3)	6 (3.1)	28 (14.7)	44 (25.3)
Current chart pop	85 (64.4)	10 (7.6)	4 (3.0)	33 (25.0)	33 (28.7)
R&B	79 (60.3)	3 (2.3)	2 (1.5)	47 (35.9)	38 (36.2)
Soul	66 (64.7)	9 (8.8)	9 (8.8)	18 (17.6)	34 (36.2)
Classical	95 (66.9)	6 (4.2)	34 (23.9)	7 (4.9)	34 (24.8)
Disco	109 (74.1)	9 (6.1)	10 (6.8)	19 (12.9)	41 (28.5)
Dance/house	77 (59.2)	4 (3.1)	2 (1.5)	47 (36.2)	36 (32.7)
Hip hop/rap	30 (45.5)	5 (7.6)	1 (1.5)	30 (45.5)	24 (49.0)
Musicals	70 (58.3)	6 (5.0)	36 (30.0)	8 (6.7)	32 (28.6)
Blues	49 (79.0)	2 (3.2)	5 (8.1)	6 (9.7)	21 (35.0)
1960s pop	84 (72.4)	5 (4.3)	18 (15.5)	9 (7.8)	33 (29.2)
Indie	76 (59.8)	7 (5.5)	4 (3.1)	40 (31.5)	27 (25.2)
Adult pop	134 (86.5)	9 (5.8)	9 (5.8)	3 (1.9)	38 (24.5)
DJ-based	39 (60.9)	7 (10.9)	0 (0)	18 (28.1)	18 (34.0)
Other pop	58 (75.3)	6 (7.8)	2 (2.6)	11 (14.3)	16 (21.6)
Other	34 (54.0)	6 (9.5)	6 (9.5)	17 (27.0)	22 (37.3)

$\chi^2 (54) = 418.75, p < 0.001$

$\chi^2 (18) = 26.77, n.s.$

1960s pop, and other musical styles were most likely to have no educational qualifications. It is also worth pointing out that a large number of fans of current chart pop achieved only BTEC/GCSE/O-level qualifications, which is consistent with their lower putative social status. These are examinations taken typically by 16-year-olds.

EMPLOYMENT

Two separate χ^2 tests were carried out to investigate any association between participants' musical preferences and two respective aspects of their employment status. The first test showed a significant association with whether the participant was currently employed, unemployed, retired or in full-time education. The second test showed no significant association with whether the participant had ever been unemployed for six consecutive months. The resulting frequencies are shown in Table 5. This table indicates that employment status was related closely to participant age (see North and Hargreaves, 2007a). Fans of jazz, rock, disco, blues, 1960s pop, adult pop, and other pop music styles were most likely to be employed (perhaps because these groups of fans were middle-aged); fans of opera, country and western, classical music, and musicals were most likely to be retired (perhaps due to their higher age); and fans of current chart pop, R&B, dance/house, hip hop/rap, indie, DJ-based music, and other musical styles were most likely to be in full-time education (perhaps because these represented the youngest groups of fans). Despite the obvious relationship between employment status and age, it is interesting to note that the fans most likely to be unemployed were those of DJ-based music, other pop music styles, soul, current chart pop, and hip hop/rap, and again this is consistent with the putative low social status of these fans.

HEALTH

Seven separate items asked participants about their health behaviours. A separate one-way ANOVA was carried out for each item to investigate any difference between the musical preference groups. These showed a significant difference between the musical preference groups in the number of times they had visited the doctor during the past three years ($F(18, 1949) = 1.81$, $p < .05$); no significant difference in the number of times the participant had been prescribed medicine during the past three years ($F(18, 1900) = 1.30$, n.s.); no significant difference in number of days for which the participant had been ill during the past three years ($F(18, 1866) = 1.30$, n.s.); no significant difference in the number of times that the participant had visited the dentist during the past three years ($F(18, 1962) = 0.53$, n.s.); a significant difference in the number of baths/showers taken per week by the participant in order to clean their body ($F(18, 2005) = 1.68$, $p < .05$); a significant difference in the number of times per week participants washed their hair ($F(18, 2007) = 2.31$, $p = .001$); and a significant difference in the number of times

TABLE 6 Homogenous subsets of means for the number of times that participants had visited the doctor in the past three years, the number of times per week that participants had a bath/shower to clean their body, the number of times per week that participants washed their hair, and the number of times per week that participants deliberately exercised

	Doctor		Bath		Hair		Exercise	
	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2		
Adult pop	4.68		6.08		4.18		Disco	1.63
Other pop	4.87		6.43		4.27		Musicals	1.69
Indie	5.37	5.37	6.46	6.46	4.30	4.30	1960s pop	1.78
Rock	5.49	5.49	6.51	6.51	4.46	4.46	Jazz	1.86
1960s pop	5.56	5.56	6.52	6.52	4.70	4.70	Other pop	1.88
Blues	5.66	5.66	6.63	6.63	4.88	4.88	Classical	1.95
DJ-based	5.67	5.67	6.78	6.78	4.98	4.98	Blues	1.95
Classical	5.68	5.68	6.85	6.85	4.98	4.98	Soul	1.99
Dance/house	6.27	6.27	6.86	6.86	5.01	5.01	Country and western	2.01
Jazz	6.36	6.36	6.94	6.94	5.05	5.05	R&B	2.19
Soul	6.47	6.47	6.95	6.95	5.09	5.09	Other	2.23
Disco	6.63	6.63	7.06	7.06	5.13	5.13	Rock	2.25
R&B	6.75	6.75	7.08	7.08	5.15	5.15	Opera	2.27
Hip hop/rap	7.17	7.17	7.12	7.12	5.21	5.21	Current chart pop	2.44
Current chart pop	7.22	7.22	7.12	7.12	5.24	5.24	Dance/house	2.45
Other	7.40	7.40	7.16	7.16	5.29	5.29	Adult pop	2.46
Musicals	7.56	7.56	7.19	7.19	5.30	5.30	Indie	2.59
Opera	7.59	7.59	7.41	7.41	5.34	5.34	Hip hop/rap	2.64
Country and western		9.03		7.56		5.42	DJ-based	2.68

per week the participant deliberately exercised ($F(18, 1934) = 2.13, p < .01$). Homogenous subsets of means (as indicated by Tukey HSD tests) for those variables giving rise to significant results are presented in Table 6.

Table 6 indicates that fans of country and western, opera and musicals had visited their doctor most over the past three years. Note that this finding cannot be attributed entirely to their greater age, however, since the fourth oldest group of fans (namely those of 1960s pop – see North and Hargreaves, 2007a) were ranked 15th. Table 6 also indicates that fans of other pop music styles bathed/showered most often in order to clean their body, whereas fans of opera did this least often. Table 6 indicates that fans of opera washed their hair least often, whereas fans of DJ-based music washed their hair most often. Finally Table 6 indicates that fans of disco exercised least frequently whereas fans of DJ-based music exercised most frequently. More generally, although it seems extremely unlikely that musical preference per se was the actual *cause* of the data presented in Table 6, this does not detract from the consistent finding of this section of the questionnaire that fans of the different musical styles did nonetheless differ in various aspects of their health. The extent to which the findings support differences between groups of fans based on putative social class is much less clear however.

To further investigate the health of the fans of the different musical styles, several items on the questionnaire investigated their drinking and smoking. A χ^2 test was carried out to investigate any association between participants' musical preferences and their preferred type of alcoholic drink (if they drank alcohol). The result of this was significant and the resulting frequencies are shown in Table 7. This table indicates that bitter (a type of beer) was most popular among fans of country and western, jazz, rock, classical music, and blues; lager was most popular among fans of country and western, hip hop/rap, indie and DJ-based music; cider was most popular among fans of dance/house, musicals, blues, indie, DJ-based music, and other pop music styles; wine was most popular among fans of opera, classical music, musicals, and adult pop; and spirits were most popular among fans of R&B, dance/house, and hip hop/rap. In particular, it is interesting that fans of putatively higher social status were most likely to prefer wine.

In addition to providing this information, participants were also asked to state the number of cigarettes they smoked per day, the age at which they first tried a cigarette (if they smoked), the number of days per week when they drank alcohol, the age at which they first tried alcohol (if they drank), and the number of units of alcohol they drank per week (where one unit represented half a pint of beer/cider, one pub measure of spirits, or one glass of wine). A series of five separate one-way ANOVAs showed that only the second of these five variables failed to give rise to a significant difference between the musical preference groups ($F(18, 1827) = 3.21, p < .001$; $F(18, 712) = 1.52, n.s.$; $F(18, 1914) = 1.93, p < .05$; $F(18, 1773) = 6.35, p < .001$; and $F(18, 1755) = 4.77, p < .001$ respectively). Homogenous

TABLE 7 *Musical preference by whether participants drank alcohol and what they usually drank (%)*

	Bitter	Lager	Cider	Wine	Spirits
Opera	7 (14.9)	5 (10.6)	0 (0)	25 (53.2)	10 (21.3)
Country and western	12 (23.1)	18 (34.6)	2 (3.8)	19 (36.5)	1 (1.9)
Jazz	15 (25.4)	15 (25.4)	1 (1.7)	22 (37.3)	6 (10.2)
Rock	39 (22.9)	40 (23.5)	5 (2.9)	54 (31.8)	32 (18.8)
Current chart pop	6 (5.4)	27 (24.1)	5 (4.5)	34 (30.4)	40 (35.7)
R&B	6 (5.4)	26 (23.4)	5 (4.5)	23 (20.7)	51 (45.9)
Soul	14 (15.4)	17 (18.7)	4 (4.4)	29 (31.9)	27 (29.7)
Classical	33 (26.8)	17 (13.8)	2 (1.6)	59 (48.0)	12 (9.8)
Disco	18 (12.9)	32 (23.0)	6 (4.3)	49 (35.3)	34 (24.5)
Dance/house	9 (7.6)	33 (28.0)	9 (7.6)	18 (15.3)	49 (41.5)
Hip hop/rap	1 (1.9)	17 (32.7)	2 (3.8)	5 (9.6)	27 (51.9)
Musicals	18 (18.4)	15 (15.3)	5 (5.1)	41 (41.8)	19 (19.4)
Blues	15 (25.9)	13 (22.4)	4 (6.9)	18 (31.0)	8 (13.8)
1960s pop	20 (18.7)	26 (24.3)	4 (3.7)	40 (37.4)	17 (15.9)
Indie	17 (14.5)	46 (39.3)	6 (5.1)	19 (16.2)	29 (24.8)
Adult pop	20 (14.7)	26 (19.1)	4 (2.9)	74 (54.4)	12 (8.8)
DJ-based	3 (5.0)	26 (43.3)	4 (6.7)	5 (8.3)	22 (36.7)
Other pop	6 (9.4)	11 (17.2)	6 (9.4)	22 (34.4)	19 (29.7)
Other	5 (9.3)	16 (29.6)	0 (0)	15 (27.8)	18 (33.3)

$\chi^2(72) = 321.17, p < 0.001$

subsets of means (as indicated by Tukey HSD tests) for those variables giving rise to significant results are presented in Tables 8–9.

Table 8 indicates that fans of blues, DJ-based music and 1960s pop smoked the greatest number of cigarettes per day, whereas fans of classical music smoked the smallest number, consistent with their putatively higher social status. Fans of DJ-based music drank alcohol on more days of the week than other fans, consistent with their putatively lower social status, and the most infrequent drinkers were fans of R&B, musicals, current chart pop, other pop music styles, soul, and country and western. Consistent with their higher level of illegal drug usage (see North and Hargreaves 2007a) and putatively lower social status, fans of hip hop/rap, indie, DJ-based music, dance/house, other pop music styles and R&B had their first drink at a relatively young age, and fans of country and western, musicals, opera, 1960s pop, classical music, current chart pop, and blues had their first drink at a relatively old age. Table 9 indicates that the heaviest drinkers were fans of DJ-based music, hip hop/rap, other musical styles, and dance/house; and this is again consistent with the relatively high prevalence of illegal drug usage and putatively lower social status of these fans. In contrast, the lightest drinkers were fans of musicals, opera, classical music, country and western, other pop music styles, current chart pop, and adult pop.

TABLE 8 Homogenous subsets of means for the number of cigarettes that participants smoked per day, number of days per week on which participants drank alcohol, the age at which participants first drank alcohol (if they drank)

	Cigarettes per day			Days drinking			Age drinking						
	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2	Set 3	Set 4	Set 5	Set 6	
Classical	1.65		R&B		2.31		Hip hop/rap	12.42					
Opera	2.19	2.19	Musicals		2.35		Indie	12.60	12.60				
Other pop	2.33	2.33	Current chart pop		2.37		DJ-based	12.69	12.69				
Rock	2.42	2.42	Other pop		2.42		Dance/house	12.98	12.98	12.98			
Indie	2.43	2.43	Soul		2.48		Other pop	13.38	13.38	13.38	13.38		
Current chart pop	2.47	2.47	Country and western		2.49		R&B	13.48	13.48	13.48	13.48	13.48	
Musicals	2.74	2.74	Disco		2.65	2.65	Soul	13.76	13.76	13.76	13.76	13.76	13.76
Adult pop	2.94	2.94	Hip hop/rap		2.66	2.66	Rock	13.76	13.76	13.76	13.76	13.76	13.76
Disco	3.36	3.36	Adult pop		2.74	2.74	Adult pop	14.01	14.01	14.01	14.01	14.01	14.01
R&B	3.42	3.42	Rock		2.74	2.74	Other	14.02	14.02	14.02	14.02	14.02	14.02
Soul	4.10	4.10	Other		2.79	2.79	Disco	14.23	14.23	14.23	14.23	14.23	14.23
Country and western	4.16	4.16	Classical		2.82	2.82	Jazz	14.36	14.36	14.36	14.36	14.36	14.36
Hip hop/rap	4.52	4.52	Indie		2.83	2.83	Blues	14.41	14.41	14.41	14.41	14.41	14.41
Dance/house	4.55	4.55	Blues		2.88	2.88	Current chart pop	14.50	14.50	14.50	14.50	14.50	14.50
Other	5.21	5.21	Dance/house		2.91	2.91	Classical	14.96	14.96	14.96	14.96	14.96	14.96
Jazz	5.22	5.22	1960s pop		2.93	2.93	1960s pop	15.19	15.19	15.19	15.19	15.19	15.19
1960s pop	5.75	5.75	Jazz		2.99	2.99	Opera	15.40	15.40	15.40	15.40	15.40	15.40
DJ-based	5.79	5.79	Opera		3.00	3.00	Musicals	15.55	15.55	15.55	15.55	15.55	15.55
Blues	6.00	6.00	DJ-based		3.59	3.59	Country and western	15.69	15.69	15.69	15.69	15.69	15.69

TABLE 9 *Homogenous subsets of means for the number of units of alcohol that participants drank per week*

	Set 1	Set 2	Set 3	Set 4	Set 5
Musicals	7.20				
Opera	8.75	8.75			
Classical	9.19	9.19			
Country and western	9.45	9.45			
Other pop	9.45	9.45			
Current chart pop	10.13	10.13			
Adult pop	10.14	10.14			
Disco	10.91	10.91	10.91		
R&B	10.92	10.92	10.92		
Soul	10.93	10.93	10.93		
Blues	11.58	11.58	11.58	11.58	
Rock	11.67	11.67	11.67	11.67	
1960s pop	12.27	12.27	12.27	12.27	12.27
Indie	12.68	12.68	12.68	12.68	12.68
Jazz	13.08	13.08	13.08	13.08	13.08
Dance/house		13.66	13.66	13.66	13.66
Other			16.83	16.83	16.83
Hip hop/rap				17.10	17.10
DJ-based					17.90

General discussion

OVERVIEW AND CAUSALITY

The present data, in conjunction with that from other sections of the questionnaire which is reported elsewhere (see North and Hargreaves, 2007a, 2007b) indicate that musical preferences correlate with other aspects of participants' lifestyles in domains as diverse as interpersonal relationships, living arrangements, beliefs, crime, media preferences, leisure activities, travel, handling of financial affairs, education, employment and health behaviours. The data indicate clearly that musical preferences *constitute part* of a broader pattern of lifestyle choices made by individuals. The data are also consistent with the results of previous research on 'taste publics' (see e.g. North and Hargreaves, 2007b) by indicating a relationship between participants' musical preferences and sociodemographic factors such that fans of 'high-art' musical styles seemed to have lifestyles indicative of the middle- and upper-classes, whereas fans of 'low-art' music seemed to have lifestyles indicative of the lower-middle and lower-classes.

This raises the issue of the extent to which second-order factors such as age and income underlie the other relationships indicated here and in the two previous papers in this series (North and Hargreaves, 2007a, 2007b). While we would not deny that some of the findings described here represent second-

order effects of age and income, there are several other findings that cannot be explained in terms of these latter two factors: there are lifestyle factors largely unrelated to age and income, particularly those reported in North and Hargreaves (2007a) relating to a liberal–conservative dichotomy, that also correlate with musical preference. For example, the data from the questionnaire indicated significant associations between musical preferences and participants' preferences between different types of alcoholic beverages; the number of units of alcohol participants consumed per week; participants' religious beliefs; the commission of driving offences; participants' preferences for taking different types of illegal drugs; whether or not the participant was in a romantic relationship; participants' access to a mobile phone; worshipping as regularly as the participant's religion says they ought; the extent to which the participants' friends were outgoing; the number of people living in the participants' home; the frequency with which participants washed their hair; the number of baths and showers taken by participants; the number of days per week in which participants consumed alcohol; the age at which drinkers first tried alcohol; belief that Government should do more to exploit alternative energy sources; belief in Scottish independence; belief that Britain should enter the Euro; belief that nuclear weapons discourage international conflict; belief in the importance of environmental issues; belief in the retention of state-funded health care; belief in the separation of school pupils according to ability; and those factors determining where participants chose to go for a night out. It is extremely difficult to see how variations in age and income could underlie factors such as these and explain their relationship with musical preference. As such, social class seems to be a partial explanation for some of the data reported across all three of the articles in this series, but it nevertheless cannot provide a complete explanation.

This raises the more general issue of causality within the present data. It should be noted that the present data by no means imply causality; it is difficult to imagine how, for example, a decision to smoke could arise *because* a person likes blues. Indeed, in practical terms it may prove impossible to disentangle the undoubtedly complex inter-relations between the variables addressed here. As noted earlier (North and Hargreaves, 2007b), a fan of classical music may be more likely to have heard music in a church. But what in turn makes fans of classical music more likely to find themselves in a church? Is it their age, their upbringing, their ideological beliefs or, more likely, a complex interaction between these and several other factors? Given this, the task of specifying the contributory role played by musical preference (if any) seems at best a daunting one.

However, the present data do at least provide some insight into a range of potential factors that have already been considered by previous research (as described in the introduction earlier). As already described, variations in both age and income can explain some of the variations in other aspects of the lifestyles of the fans of different musical styles. Furthermore, the present

research provides some indication that the low culture versus high culture distinction may explain some of the variations between different groups of fans: a preference for a low-culture musical style seemed to correlate with preference for a range of other low-culture lifestyle (and particularly media) choices (North and Hargreaves, 2007b). There was also support for the notion that artistic preferences were related to social class per se, such that fans of 'high-art' music should be drawn from a higher social class than fans of 'low-art' music. However, although fans of 'high-art' music tended to be better educated and have higher incomes, it is interesting that fans of less elite musical styles were often able to match them in these respects, for example, fans of soul had high incomes; fans of 1960s pop paid off a high proportion of their credit card balance every month; fans of musicals were able to spend a lot of money on food; and fans of blues were more likely than most to have a PhD or master's degree. The present data also highlights another variable that may provide a means of classifying the lifestyles of the fans of different musical styles. One consistent finding of the present research (see North and Hargreaves, 2007a) was that groups of fans could be divided meaningfully in terms of a liberal-conservative dichotomy. The clearest indication of this was provided by the sections of the questionnaire concerning relationships, beliefs and crime. Responses to these frequently gave rise to the often-assumed dichotomy between pop and 'serious' music, with responses from fans of each tending to cluster together. Note, however, that fans of pop did not always provide responses indicating a greater degree of liberalism: they were generally more likely to have taken a range of illegal drugs than fans of serious music, but they often held political beliefs that were more right-wing than were those of the fans of 'serious' music. In short, the findings above provide support concerning several factors that have previously been claimed to correlate with musical preference, but do not provide unequivocal evidence for the primary importance of any single one of these.

One clear pattern to emerge from the data that also deserves further comment was the apparent clustering of responses provided by fans of hip hop/rap, dance/house, R&B, and DJ-based music. The specific responses given by these fans rarely differed, reflecting what might be termed a 'problem pop' culture. This involved a clear preference for 'low-culture' media; an unusually 'masculine' approach to interpersonal relationships; a desire for more friends (which is perhaps indicative of loneliness); a variety of rather uncaring moral and political beliefs; relatively high rates of crime, drinking and drug use; and levels of health that were surprisingly poor given the relative youth of the fans in question. In short, the fans of 'problem pop' seemed to have a lifestyle similar to that portrayed in American rap music's depiction of urban street culture, and the present data go some way to justifying concerns about the potentially deleterious effects of these musical styles.

It is also worth mentioning two other aspects of the data provided by fans of 'problem pop' styles. First, although the fans had similar lifestyles, these were also clearly different from those lifestyles enjoyed by participants who liked other forms of pop music. Fans of adult pop, 1960s pop and soul, for example, were very different from fans of 'problem pop' styles. As such, it is wrong to regard fans of 'pop music' as a single homogenous societal group, and instead it may be more accurate to address separate clusters of pop music styles as unique in their own right. Second, a coherent music-lifestyle relationship existed for several groups of fans other than those of 'problem pop', despite the claims of conservative protestors (see Nuzum, 2001), it is not true that 'problem pop' music alone potentially represents a means of indoctrinating people into a particular lifestyle. Instead, the present data provide clear evidence that fans of several non-pop musical styles had lifestyles that were different from those of other fans and that were also internally coherent. For example, several aspects of the responses of country and western fans were consistent with the notion of a dour, parochial, and low-culture lifestyle. As the above data indicate, several aspects of the responses of opera and classical music fans were consistent with the notion of an intellectual and economic elite. There was some evidence also that a coherent pattern of lifestyle choices obtained for fans of jazz and current chart pop.

This in turn raises the issue of the extent to which the lifestyle of the fans of these musical styles has potentially been influenced by the music they listen to. The present data provide no indication regarding cause and effect, but do seem to suggest that there may well be a relationship between lifestyle and the typical characteristics and connotations of the musical style in question. For example, fans of 'problem pop' styles have an anti-authoritarian lifestyle which mirrors that portrayed by the music. Fans of country and western have a dour, parochial, and low-culture lifestyle that mirrors the conventional lyrical themes of country and western music (which focus primarily on interpersonal relationships and other mundane aspects of everyday life). Fans of opera and classical music have a lifestyle indicative of membership of an intellectual and economic elite that mirrors the pro-establishment connotations of these musical styles. Fans of jazz have rather urbane elements of their lifestyle that mirror the sophisticated nature and connotations of this musical style. Fans of current chart pop have rather unsophisticated elements of their lifestyle that mirror the superficial image of current chart pop. It remains to be determined whether the fans of these styles are attracted to the music because it addresses issues they are interested in; whether being a fan of the style in question has the power to mould the fans' lifestyle; whether both influences have a role to play; or whether these apparent relationships between lifestyle and the connotations of the music in question are merely coincidental.

LIMITATIONS AND FUTURE RESEARCH

The present research was necessarily quantitative in order to facilitate the use of a large sample, and future research may compensate for this by adopting a more qualitative approach. This may involve a more detailed investigation into the lifestyle of a much smaller group of fans, and begin determining the complex inter-relations of cause and effect that surely underlie the data reported here. Future research may also investigate the extent to which the results described here generalize to other cultures and are time dependent. It is quite possible, for example, that new pop music subcultures may evolve with quite distinct lifestyles that do not map neatly onto any of the pop music lifestyles identified here. Similarly, continuing improvements in technology mean that an ever-increasing range of music is becoming available to an ever-increasing number of people. This in turn should affect the make-up of the group of people calling themselves fans of any particular musical style, such that their typical lifestyle should evolve over time. More generally, although musical preferences may correlate with lifestyle choices within non-western cultures, it would be extremely surprising if the present pattern of results could be replicated outside Europe and North America.

Similar work may also attempt to determine whether the pattern of findings described here has any predictive value among a new sample of participants: is it possible to predict participants' musical preference on the basis of their lifestyle choices? Such work would require a greater quantity of interval or ratio data than that gathered by the present questionnaire, but if successful would have various implications for psychology, music education, and marketing. Another issue that might be addressed by future research concerns the potential use of unobtrusive measures of lifestyle. The present study necessarily employed a questionnaire to obtain data concerning a large number of variables from a large sample. This of course raises the possibility that participants may have lied in some responses, by, for example, boasting about having had a large number of sexual partners. Future research concerning a small number of variables and a smaller sample may use unobtrusive measures to overcome difficulties such as these.

Conclusion

We began the present research by questioning whether musically based lifestyles were an anachronism, unique to the 1970s when previous research was carried out, and whether their existence was unique to North America. The above data indicate that significantly different lifestyles can be identified among the fans of different musical styles in early 21st-century British society, and describe the precise nature that these take. Furthermore, the present data indicate that the scope of these 'lifestyle preference cultures' extends well beyond the narrowly defined sociodemographic factors (e.g. ethnic and religious variables) that were addressed by earlier research.

Rather, musical preference correlates with a range of lifestyle choices within a variety of different domains. The principal challenges facing future research are to identify why musical preferences *should* be associated with lifestyle choices, and to further determine the main lifestyle dimensions along which groups of fans differ from one another.

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