Parenting Style and Youth Outcomes in the UK*

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We apply latent class analysis to data on parent–teenager interaction that was collected in the Youth Panel of the British Household Panel Survey. The three parenting styles that we identify—authoritative, authoritarian, and permissive—correspond quite closely to those proposed by child development psychologists. Multivariate analysis shows that parenting style in contemporary UK is structured primarily by family structure and not by social class. There are consistent and strong associations between parenting style and a wide range of youth outcomes, including subjective well-being and self-esteem, health and risky behaviour, and school results and enrolment.

Introduction

There are recurrent and occasionally heated political debates about youth crime, truancy, and yobbish behaviour, to which inadequate parenting is often seen as a contributing factor. In the UK, with the introduction of the Crime and Disorder Act 1998 and the Anti-Social Behaviour Act 2003 (Home Office, 2003), local education authorities can now apply to the court for a 'parenting order', which might require parents to escort their child to school to ensure attendance or to ensure that their child stays at home during specified hours. A parenting order might also compel parents to attend parenting classes for a period of up to 3 months. Clearly, it is of considerable policy interest to ascertain the pattern of parenting style in the UK and other societies.

But parenting style is also an important topic from a general sociological standpoint. Scholars of intergenerational social mobility or status attainment have long established that family background matters a great deal in determining a person's life chances (Erikson and Goldthorpe, 1992; Hauser et al., 2000). But through what mechanisms does the intergenerational transmission of advantages and disadvantages take place? The Winconsin model of status attainment (Sewell et al., 1969, 1970; Sewell and Hauser, 1980) stresses the role of aspiration in the attainment process. It also posits that aspiration is, in turn, shaped by the expectation of parents and other significant others. This literature is indeed informative. But then how do parents shape their children's aspiration? To address this question adequately, we need to move beyond treating what happens within the family as a blackbox. Instead, we need to study parent–child interaction directly.

Previous Research on Parenting Style

We review three sets of literature in this section. The first are sociological studies which treat parenting practice as an independent variable. Secondly, we

review typologies of parenting style developed by child development psychologists. Finally, we consider socio-logical research which treats parenting style as the dependent variable.

Parenting Style as Independent Variable in Sociological Research

There is indeed evidence to suggest that parenting practice matters, especially for educational outcome. For example, Astone and McLanahan (1991) analyse data from the High School and Beyond Study, and show that students' educational outcomes are better if parents want their children to graduate from college, supervise their schoolwork, or simply talk to them at least weekly. But Astone and McLanahan (1991) also show that these parenting practices explain little of the gap in educational attainment between children from intact and non-intact families.

Similarly, Pong et al. (2005) use data from the Add Health Study and show that, net of family socioeco-nomic background and other demographic variables, parenting styles have positive associations with stu-dents' grade-point average. However, they argue that parenting style does not mediate the ethnicity–genera-tional differences in school grades.

In a third paper that is based on the National Educational Longitudinal Study, McNeal, Jr (1999) shows that students' truancy and drop-out rates are lower if parents are involved in parent–teacher asso-ciations (PTAs), discuss educational matters with their child, or monitor their child's behaviour. However, the result is less consistent when it comes to science achievement scores: while parent–child discussion is associated with *higher* achievement scores, parental monitoring and parental involvement in PTAs are associated with *lower* scores. This leads McNeal to conclude that parental involvement is more salient for behavioural than for cognitive outcomes. He also argues that parental involvement has stronger effects for white and more affluent students.

The results regarding non-educational outcomes are less consistent across studies. For example, Barnes and Farrell (1992) report that, net of various controls, including family history of alcohol abuse, higher levels of parental support, and monitoring are associated with lower levels of alcohol use, drug use, and delinquent behaviour among adolescents. In contrast, Ennett et al. (2001) report that parent–child commu-nication about tobacco and alcohol use is *not* associated with the initiation of smoking or drinking among adolescents.

Similarly, the evidence from a longitudinal study of adolescent sexual behaviour is rather equivocal. Bersamin et al. (2008) report that parental monitoring and good mother–child communication is associated with lower initiation rates of oral sex among adoles-cents. But these two variables do not predict the initiation of vaginal intercourse. Further, although parental 'disapproval of sex' lowers initiation rates of both oral sex and vaginal intercourse, parent–child communication about sex is associated with higher initiation rates.[1]

The inconsistency of these results might to some extent be due to the relatively small N of the studies and, in some cases, the local nature of their sample.[2] To adjudicate these differences, there is clearly a need to examine the associations between parenting practice and a wide range of outcome variables, using a nationally representative sample of reasonable size.

The studies reviewed above are based on US data. In the UK, there are some studies on the importance of parenting practice for very young children. For exam-ple, Kiernan and Huerta (2008) use data from the Millennium Cohort Study and show that parent's reading to a child is associated with higher cognitive development of the child at age 3. Also, parent's disciplinary style is associated with child's behavioural problem. Similar results, also based on the Millennium Cohort Study, are reported by Ermisch (2008).

Research in Child Development Psychology

Child development psychologists have long studied parenting style and their covariates. The work of Baumrind (1978, 1991) is especially influential. Baumrind proposes a 3-fold typology of parenting style, which she refers to as authoritative, authoritar-ian, and permissive. Authoritative parents seek to direct their child's activities in a 'rational issue-oriented manner'. They encourage verbal give and take by sharing with their child 'the reasoning behind parental policy' and they would solicit 'the child's objections when the child refuses to conform'. In this way, an authoritative parent 'exerts firm control . . . but does not hem the child in with restric-tions' (Baumrind, 1978, p. 245). Authoritarian parents, on the other hand, do not encourage verbal give and take. They value obedience and 'favour punitive, forceful measures' when parent–child conflict arises. Also, '[a]uthoritarian parents may be very concerned and protective or they may be neglecting' (Baumrind, 1978, p. 244). Finally, a permissive parent 'sees him- or herself as a resource for the child to use as he wishes, but not as an active agent responsible for shaping and

altering the child's ongoing and future behavior …Some permissive parents are very protective and loving, while others are self-involved and offer freedom as a way of evading responsibility for the child's development' (Baumrind, 1978, p. 248).

Baumrind's research is based on observations in naturalistic settings, laboratory experiments, and structured interviews. Although these methods generate very rich information and important insights, the study samples are inevitably small and often quite homogeneous in terms of socio-economic background and race/ethnicity. Thus, the wider generalizability of these results is open to question. Also, Maccoby and Martin (1983) note that Baumrind's typology implies two underlying dimensions of parenting: responsiveness and demandingness. Cross-cutting these two dimensions should logically give four parenting styles: authoritative, authoritarian, indulgent, and neglectful.

To address these methodological and theoretical issues, Lamborn et al. (1991) examine data collected in a survey of 9th through 12th grade students in Wisconsin and California ($N \approx 10,000$), which contains detailed information on parent–child interaction. Based on relevant survey items, Lamborn et al. (1991, p. 1053) develop two additive scales: one on parental acceptance/involvement (akin to the responsiveness dimension in Maccoby and Martin); the other on strictness/supervision (akin to demandingness). They then trichotomize these two scales, and cross-classify them to form a 3×3 table. The four corner cells of this table are then taken as representing the four parenting styles of Maccoby and Martin (see Table 1).

Having identified the four parenting styles in this manner, Lamborn et al. then show that parenting styles do have statistically significant associations, in the expected direction, with a range of youth outcomes such as school achievement, psychosocial development, internalized distress, and problem behaviour. These are intriguing and promising results. But to trichotomize the two scales is an arbitrary step in the analysis, and the decision to use the four corner cells only (and thus disregarding all respondents reporting medium level of acceptance/involvement or strictness/supervision) is wasteful of information. A less *ad hoc* analysis that makes use of all information would be desirable.

Parenting Style as Dependent Variable in Sociological Research

Who is more likely to adopt which parenting style? The sociological classic in this area is Kohn (1977), who is in fact more interested in value orientation than parenting style *per se*. Kohn advances two claims. The first claim is that the work conditions and work requirements in different social classes are associated with different value orientation.[3] Middle-class occupations involve more 'complex work with data or with people'. These tasks are 'too diverse to be routinized', thus requiring middle-class individuals to be self-directed, to 'think for themselves'. In contrast, working class occupations are routinized and closely supervised by others, requiring their incumbents to take orders from others. This then fosters a value orientation of conformity to external authority among the working class.

Kohn's second claim is that these class-based value orientations are then expressed, somewhat weakly but in a consistent manner, in the characteristics that parents value in their children and in parental discipline. Thus, Kohn (1977, p. 51) reports that lower class parents are more likely to value 'manners' while higher class parents are more likely to value 'consideration of others'. Likewise, '[b]eing a good student, with its emphasis on how one's performance is judged by others, is more highly valued at lower class levels; an interest in how and why things happen, with its emphasis on intellectual curiosity, at higher class levels' (Kohn, 1977, pp. 51–52). Also, working class mothers are more likely to use physical punishment against persistently misbehaving child (Kohn, 1977, p. 95). In this way, Kohn connect social class with values, and parenting becomes a mechanism in the reproduction of the social structure and personality. This proves to be a very productive research programme, and supportive results have been reported for several countries, including Italy, Japan, Poland and the, United States (Pearlin and Kohn, 1966; Kohn et al., 1990).

Also relevant to our concern is the voluminous literature on family structure and child's outcome. Several mechanisms have been proposed to account for the observed associations between growing up in a non-intact family and higher drop-out rate or greater risk of teenage birth. These include arguments which

Table 1 Operationalizing a typology of parenting styles by Lamborn et al. (1991)

Acceptance/ involvement	Strictness/supervision		
	High	Medium	Low
High	Authoritative		Indulgent
Medium			
Low	Authoritarian		Neglectful

stress difference in economic resources (McLanahan, 1985), prior confounding factors (Cherlin *et al.*, 1991), the tendency of step-children to receive less parental investment (Biblarz and Raftery, 1999; Case *et al.*, 2000, 2001), and the *number* of family disruption events that a child experienced (Wu and Martinson, 1993; Wu, 1996). But what is most relevant for our present purpose is the argument that parenting style differs across family types. Astone and McLanahan (1991, p. 311) argue that 'the parental authority structure is weaker in single-parent or stepparent families ... in part because single mothers often make confidants of their children'. It is also possible that some step-parents do not feel they have the authority to discipline step-child (Biblarz and Raftery, 1999; Sandefur and Wells, 1999). Although, as noted above, parenting practice explains little of the gap in educational attainment between children from intact and non-intact families (Astone and McLanahan, 1991), the point remains that parenting style might vary by family structure.

Given the considerations outlined above, we have three goals in this article. First, we wish to test if the typology of parenting style, as posited by child development psychologists, could be identified in the United Kingdom using nationally representative survey data and formal statistical models.[4] Secondly, we wish to establish the empirical correlates of parenting style. Following Kohn, we expect there to be systematic variation of parenting style by social class. And following Astone and McLanahan (1991) and other family sociologists, we expect parenting style to vary by family structure. Finally, we explore whether parenting style is associated with youth outcomes in the domains of (i) subjective well-being and self-esteem, (ii) health and risky behaviour, and (iii) academic achievement and school enrolment. If parenting style is indeed a key dimension in family life, authoritative parenting should be associated with more optimal outcomes across these domains.

Data and Methods

The data we use come from the Youth Panel of the British Household Panel Survey (BHPS). The BHPS is a nationally representative panel survey. When it began in 1991, 10,300 individuals from some 5,500 house-holds were sampled from 250 areas in Great Britain. In the main panel of the BHPS, all household members aged 16 or over are interviewed annually. Since 1994, children aged 11–15 in all BHPS households are also interviewed separately over a wide range of topics,

including their aspiration and life plan, social attitudes, health behaviour, and, most relevant for us, how they relate to and interact with their parents. The Youth Panel questions are pre-recorded and played to the young people through a personal stereo system. And the questionnaire form in which they fill in their answers contains the answer categories only. This survey protocol should minimize the potential bias that might arise because of the presence of parents during the interview. In this article, we focus on 15-year-olds who were interviewed between 1994 and 2001 ($N = 1,456$). The following six questions have been asked consistently between 1994 and 2001 (the answer categories are shown in brackets), and they form the raw data of our analysis.

(1) Do your parents ever stop you watching a particular programme, because they don't think it is suitable? (yes, no)

(2) In the past month, how many times have you stayed out after 9 pm at night without your parents knowing where you were? (never, 1 or 2, 3–9, 10 or more times)

(3) When you go out, do you tell your parents where you are going? (always, usually, sometimes, never)

(4) In the past 7 days how many times have you eaten an family meal altogether with your family? (none, 1 or 2, 3 to 5, 6 or 7 times)

(5) How often do you talk to your mother/father, about things that matter to you? (most days, more than once a week, less than once a week, hardly ever)

(6) Most children have occasional quarrels with their parents. How often do you quarrel with your mother/father? (most days, more than once a week, less than once a week, hardly ever)[5]

Roughly speaking, questions 1–3 measure strictness of parental supervision, while questions 4–6 measure how close the teenagers are to their parents. Together, the six questions tap the two dimensions of strictness/supervision and acceptance/involvement in Lamborn *et al.*

The joint distribution of responses to these six questions are input to our latent class analysis. Latent class models seek to capture the association that exists among the six indicators through a small number of discrete latent classes. In effect, we are analysing a six-way contingency table with 2,048 (i.e. 2×4^5) cells. Given that $N = 1,456$, this table is clearly too sparse to support reliable analysis, and some preliminary data reduction are necessary.[6] The most straightforward way

Table 2 Distribution of indicators of parent–children interaction (per cent)

Item	Response categories	Distribution	
(1) TV programme	Yes	35.3	35.3
	No	64.7	64.7
(2) Out late	Never	57.0	78.9
	1–2	21.8	
	3–9	10.2	21.2
	10 or more	10.9	
(3) Tell parents where	Always	39.9	77.3
	Usually	37.4	
	Sometimes	18.1	22.7
	Not usually	4.5	
(4) Family meal	None	14.8	42.2
	1–2	27.4	
	3–5	30.2	57.8
	6–7	27.6	
(5) Talk to parents	Most days	26.5	51.9
	More than once a week	25.3	
	Less than once a week	22.1	48.2
	Hardly ever	26.1	
(6) Quarrel with parents	Most days	7.0	24.3
	More than once a week	17.3	
	Less than once a week	22.5	75.7
	Hardly ever	53.2	

Table 3 Goodness of fit statistics of latent class models

Model	# latent class	G^2	df	P	BIC	Classification error
1	1	535.18	57	0.00	120.02	0.000
2	2	95.80	50	0.00	−268.37	0.093
3	3	41.85	43	0.52	−271.34	0.220

to do so is to dichotomize the response categories of questions 2–6, as shown in the last column of Table 2. What we wish to know is whether, underlying these data, there are certain relatively well-defined parenting styles, such that if these types can be identified and separated as latent classes, then conditional on class membership, the indicators would become statistically independent of each other. This principle of 'local independence' is key to all latent variable analyses, including latent class models (McCutcheon, 1987).[7]

Results

Latent Class Analysis

Table 3 shows that a three-latent class solution cannot be rejected using the conventional criterion of 5%

type I error. The Bayesian information criterion (BIC) also favours model 3 over model 2.[8]

Table 4 reports the details of this three-class solution. In terms of their relative size, the three latent classes account for 42, 35, and 23 per cent of the sample, respectively. Turning to the conditional probabilities of parent–teenager interaction, it can be seen that when compared with youths in latent class 3, those in latent class 1 or latent class 2 are more likely to say that their parents had stopped them watching particular TV programmes ($P = 0.46$ and $P = 0.34$ as compared with $P = 0.17$). Youths in latent class 1 or 2 are also less likely than those in latent class 3 to have stayed out late more than three times last month ($P = 0.05$ and $P = 0.00$ as compared with $P = 0.85$). And they are more likely to tell their parents where they are going when they go out ($P = 0.97$ and $P = 0.81$

Table 4 Estimated relative size of the latent classes and conditional probability of various forms of parent–children interaction

Relative size	1 0.423	2 0.351	3 0.226
Rules on TV programme	0.459	0.343	0.170
Out late more than three times in past month	0.045	0.004	0.846
Always or usually tell parents where you are going	0.972	0.808	0.349
3–7 family meals in past 7 days	0.833	0.359	0.442
Talk to parents more than once a week	0.766	0.331	0.347
Quarrel with parents more than once a week	0.161	0.262	0.368

Table 5 Percentage of youths within each latent class reporting

	Authoritative	Authoritarian	Permissive	*N*
Parents always or usually tell you where they are going	86.6	80.4	75.9	683
Parents set limits on amount of TV	31.6	20.1	17.5	965
Mother or father chooses what you eat at home	71.2	59.6	61.7	967
Parents talked to you about smoking and health	79.9	66.3	68.2	827
Parents talked to you about drugs	72.4	61.4	55.6	969
Parents check how well you are doing at school	57.5	49.5	50.2	1,087

as compared with $P = 0.35$). Thus, it would seem that in terms of strictness of supervision, the main division is between latent classes 1 and 2 on the one hand, and latent class 3 on the other.

Turning to items 4–6, which measure how close the teenagers are to their parents, the division is between latent class 1 on the one hand and latent classes 2 and 3 on the other. Thus, with $P = 0.83$, youths in latent class 1 report that they had 3–7 family meals last week, as compared with $P = 0.36$ for latent class 2 and $P = 0.44$ for latent class 3. Also, compared with youths in latent class 2 or 3, those in latent class 1 are more likely to talk to their parents ($P = 0.77$ compared with $P = 0.33$ and $P = 0.35$), and are less likely to have quarrel with parents ($P = 0.16$ as compared with $P = 0.26$ and $P = 0.37$). Given these conditional probabilities, it seems reasonable to label the three latent classes as youths whose parents are, respectively, authoritative, authoritarian and permissive in their parenting style.[9]

There are other questions in the BHPS Youth Panel which give further support to the typology that we identify. As these questions are not consistently included in the Youth Panel between 1994 and 2001, we cannot use them in our latent class analysis. But Table 5 shows that youth with authoritative parents are more likely to report that their parents (1) tell them where they are going when they go out, (2) set limits

on how much TV they watch, (3) choose what they eat at home, (4) talk to them about smoking and health and about drugs, and (5) check how well they do at school.

Who Adopts which Parenting Style?

Our latent class analysis suggests that in contemporary United Kingdom three parenting styles can be identified, which turn out to be quite similar to the 3-fold typology of Baumrind (1978, 1991). But who adopts which parenting style? In Table 6, we cross-tabulate parenting style with family structure, parent's social class, and parent's education. It can be seen that, in proportional terms, authoritative parenting is more common among two-parents families (53 per cent) than among single-parent families (32 per cent) or step-families (40 per cent).

Using a 7-fold version of the Goldthorpe (2007, p. 104) class schema, we see a class gradient in parenting style, with authoritative parenting being more common among the salariat (classes I and II) than among other social classes. Correspondingly, permissive parenting generally becomes more common as one goes down the class hierarchy, while the association between authoritarian parenting and social class is less clear. Finally, the last section of Table 6 shows that the gradients in parenting style by parent's education are similar to those by social class.

Table 6 Distribution of parenting styles by family structure, parent's social class, and parent's education

	Authoritative	Authoritarian	Permissive	*N*
By family structure				
Two-parents families	52.6	31.8	15.7	875
Single-parent families	31.8	40.4	27.8	324
Step-families	39.7	38.8	21.6	232
Overall	45.8	34.9	19.4	1,431
By parent's class				
I (higher salariat)	50.5	34.4	15.1	279
II (lower salariat)	55.9	28.7	15.5	265
III (routine non-manual)	46.4	34.6	19.0	384
IV (self-employed)	36.2	41.5	22.3	94
V (foremen, technicians)	35.4	39.2	25.3	79
VI (skilled manual)	37.9	39.7	22.4	58
VII (non-skilled manual)	37.5	36.3	26.2	240
Overall	45.8	34.7	19.5	1,399
By parent's education				
Degree	55.3	30.9	13.8	188
Sub-degree	52.3	31.2	16.5	442
A-levels	44.2	34.8	21.0	138
O-levels	41.3	38.0	20.7	271
CSE/others	36.7	42.5	20.8	120
No qualification	36.8	36.4	26.8	250
Overall	45.7	34.7	19.6	1,409

In short, there are *bivariate* associations between parenting style on the one hand, and family structure, parent's social class, or parent's education on the other. However, the pattern is quite different in a multivariate framework. In Table 7, we report the result of a multinomial logistic regression in which the 3-fold parenting typology serves as the dependent variable.[10] It can be seen that girls are less likely than boys to report having permissive rather than authoritative or authoritarian parents. Also, the parenting style in single-parent families and step-families are more likely to be authoritarian or permissive rather than authoritative. Controlling for gender and family structure, most of the parameters for parent's class or education are not statistically significant, except for parents with no qualifications who are more likely to be authoritarian or permissive rather than authoritative when compared with parents with university degree. Overall, the results reported in this section are consistent with Astone and McLanahan (1991), but *not* with Kohn (1977).[11]

Implications of Parenting Style

Having explored parenting style as a dependent variable, we now consider its explanatory relevance as an independent variable in three domains: (i) subjective well-being and self-esteem, (ii) health and risky behaviour, and (iii) academic achievement and school enrolment.

Subjective well-being and self-esteem

There are several indicators of subjective well-being and self-esteem in the Youth Panel. For example, one question asks: 'In the past month, how many days have you felt unhappy or depressed?' Respondents could choose their answer from four categories: none (26.7 per cent of the respondents chose this category), 1–3 (45.5 per cent), 4–10 (20.6 per cent), 11 or more (7.2 per cent). Another question asks: 'In the past week how many nights have you lost sleep worrying about things?' There are again four answer categories: none (68.9 per cent), 1–2 (24.3 per cent), 3–5 (5.1 per cent), 6–7 nights (1.7 per cent). We have dichotomized the responses to these two questions, contrasting the two higher categories with the two lower categories, and model their association with various predictors using the logistic regression model.[12]

We have also constructed two additive scales on self-esteem and 'happiness', respectively. The

Table 7 Multinomial logistic regression predicting latent class membership ($N = 1,138$)

	Authoritarian Versus authoritative		Permissive Versus authoritative		Permissive Versus authoritarian	
	β	SE	β	SE	β	SE
Female	0.029	0.138	−0.522**	0.169	−0.550**	0.176
Single-parent[a]	0.747**	0.203	1.146**	0.226	0.399	0.225
Step-families	0.447*	0.212	0.712**	0.245	0.265	0.253
Subdegree[b]	0.216	0.218	0.365	0.282	0.150	0.304
A-levels	0.404	0.299	0.607	0.367	0.203	0.392
O-levels	0.486	0.262	0.489	0.329	0.003	0.350
CSE/others	0.613	0.320	0.371	0.406	−0.242	0.420
No qualification	0.659*	0.302	0.854*	0.363	0.195	0.380
II (lower salariat)[c]	−0.614**	0.216	−0.370	0.271	0.244	0.292
III (routine non-manual)	−0.424	0.222	−0.140	0.277	0.284	0.291
IV (self-employed)	−0.238	0.310	0.160	0.368	0.398	0.388
V (foremen, technicans)	0.154	0.311	0.059	0.405	−0.094	0.408
VI (skilled manual)	−0.317	0.371	0.073	0.439	0.389	0.460
VII (non-skilled manual)	−0.219	0.279	0.178	0.330	0.397	0.340
constant	−0.602*	0.280	−1.319**	0.354	−0.716	0.376
Log-likelihood			−1,129.78			
R^2			0.040			

Note: The estimates shown are net of dummies of survey year.
[a]*Reference category is intact two-parents families.*
[b]*Reference category is university degree.*
[c]*Reference category is class I (higher salariat).*
*P < 0.05; **P < 0.01 (two-tailed tests).

self-esteem scale is based on the following Likert-type items. (1) I feel I have a number of good qualities. (2) I certainly feel useless at times. (3) I am a likeable person. (4) I am inclined to feel I am a failure. (5) At times I feel I am no good at all. After reversing the coding for items 1 and 3, and adding up the score, our scale for self-esteem ranges from 5 to 20 (mean = 15.7, SD = 2.68, α = 0.78), with higher scores denoting higher self-esteem.

As regards the scale on 'happiness', we use the following question: 'The next few questions are about how you feel about different aspects of your life ... I want you to tick the box that comes closest to expressing how you feel about the following things ... (1) your school work, (2) your appearance, (3) your family, (4) your friends, (5) your life as a whole'. Respondents can choose their answers from (1) 'completely happy' to (7) 'completely unhappy'. We reverse the coding and add up the scores of the five items, giving a scale that ranges from 6 to 35 (mean = 28.0, SD = 4.44, α = 0.73), with happier respondents reporting higher scores.

It can be seen from Table 8 that girls are more likely than boys to report feeling sad or losing sleep over worries. Girls also have lower self-esteem and are less happy than boys. The gender gap in subjective well-being among 15-year-olds is very large. For example, other things being equal, the odds of feeling sad is almost 4 times ($e^{1.332}$) higher for girls than for boys, and the self-esteem score for girls is half a standard deviation (i.e. 1.368/2.677) lower than that for boys.

Table 8 also shows that family structure and parental social class have no association with subjective well-being. In contrast, parenting style has consistent and statistically significant *net* associations with subjective well-being and self-esteem, in the expected directions. For example, compared with youths with authoritative parents, the odds of feeling sad is 60 per cent ($e^{0.467} - 1$) higher for those with authoritarian parents; as for those with permissive parents, their odds of feeling sad is more than double ($e^{0.783}$). The substantive magnitude of the associations between losing sleep over worries and parenting

Table 8 Effects of parenting style on subjective well-being and self-esteem

	Logit		Logit		OLS		OLS	
	Feel sad		Lost sleep		Self-esteem		Happiness	
	β	SE	β	SE	β	SE	β	SE
Female	1.332**	0.133	1.187**	0.244	−1.368**	0.136	−1.479**	0.232
Single-parent[a]	0.156	0.169	0.017	0.289	−0.143	0.181	−0.485	0.309
Step-families	0.266	0.186	0.106	0.316	−0.300	0.198	−0.235	0.337
II[b]	−0.196	0.203	−0.046	0.376	0.148	0.218	0.458	0.370
III	−0.265	0.190	0.034	0.338	−0.279	0.204	0.074	0.348
IV	−0.533	0.293	0.341	0.446	0.065	0.301	0.748	0.514
V	−0.229	0.299	0.409	0.463	−0.456	0.322	0.263	0.552
VI	−0.652	0.367	−0.731	0.771	−0.389	0.363	0.189	0.620
VII	−0.293	0.220	−0.158	0.398	−0.305	0.237	0.406	0.403
Authoritarian[c]	0.467**	0.146	0.580*	0.269	−0.887**	0.154	−1.737**	0.262
Permissive	0.783**	0.175	1.193**	0.293	−0.741**	0.187	−1.917**	0.319
Constant	−1.128**	0.241	−3.623**	0.453	15.808**	0.268	29.473**	0.456
N	1,397		1,396		1,384		1,387	
R^2	0.094		0.072		0.140		0.077	
Log-likelihood	−749.54		−314.84					

Note: The estimates shown are net of dummies of survey year.
[a]*Reference category is intact two-parents families.*
[b]*Reference category is class I (higher salariat).*
[c]*Reference category is authoritative parenting.*
*$P < 0.05$; **$P < 0.01$ (two-tailed tests).*

style is even stronger. And youths with authoritarian or permissive parents have lower self-esteem and are less happy than youths with authoritative parents.

Health and Risky Behaviour

The BHPS contains the following questions on young people's health and risky behaviour.

(1) Have you ever tried a cigarette, even if it was only a single puff? (62.2 per cent of the respondents said 'yes'.)

(2) Do any of your friends ever use illegal drugs, such as smoking cannabis, or taking ecstasy, cocaine or crack? (46.9 per cent of the respondents said 'none', 42.9 per cent said 'a few', 10.1 per cent said 'most'.)

(3) How often in the past month have you had a fight with someone that involved physical violence, such as hitting, punching, or kicking? (72.7 per cent replied 'none', 17.6 per cent said '1', 7.4 per cent said '2–5', 0.9 per cent said '6–9', 1.4 per cent said '10 or more'.)

We have dichotomized the response to the second and third questions above, contrasting those who report that none of their friends uses drug against the rest, and those who have not been involved in any fight at all against the rest.[13]

Table 9 shows that girls are more likely than boys to have ever smoked cigarettes and to have friends who use drugs, but they are less likely to be involved in physical fights. A similar contrast can be seen for teenagers from single-parent families as compared with those from two-parents families. The associations between parental social class and risky behaviour is rather uneven, and they apply mainly to 'drug use', where youths from classes II, III, VI, and VII are *less* likely than those from higher salariat background (class I) to report drug use among friends.

What is most interesting for us is that, other things being equal, risky behaviours are more common among teenagers with authoritarian or permissive parents. For example, compared with youths with authoritative parents, the odds of having ever smoked is 89 per cent ($e^{0.634}-1$) higher among youths with authoritarian parents. As for youths with permissive parents, their odds of having ever smoked increase by a factor of five ($e^{1.643}$).

Academic Achievement and School Enrolment

Finally, let us consider the associations between parenting style and academic achievement and school

Table 9 Effects of parenting style on health and risky behaviour

	Logit Ever smoked		Logit Friends use drugs		Logit Fight with others	
	β	SE	β	SE	β	SE
Female	0.384**	0.11	0.266*	0.120	-0.615**	0.128
Single-parent[a]	0.389*	0.161	0.468**	0.163	-0.411*	0.172
Step-families	0.234	0.172	0.182	0.174	0.151	0.177
II[b]	0.300	0.184	−0.393*	0.193	−0.224	0.214
III	0.418*	0.174	−0.801**	0.182	0.286	0.189
IV	0.319	0.262	−0.194	0.274	0.243	0.272
V	0.322	0.283	−0.405	0.288	−0.310	0.319
VI	0.113	0.310	−1.073**	0.328	0.113	0.334
VII	0.074	0.203	−1.230**	0.214	0.381	0.215
Authoritarian[c]	0.634**	0.128	0.597**	0.134	0.633**	0.147
Permissive	1.643**	0.188	1.458**	0.174	1.112**	0.167
Constant	−0.745**	0.228	0.236	0.239	−1.013**	0.246
N	1,396		1,276		1,396	
R^2	0.074		0.081		0.064	
Log-likelihood	−856.02		−810.59		−765.25	

Note: The estimates shown are net of dummies of survey year.
[a]*Reference category is intact two-parents families.*
[b]*Reference category is class I (higher salariat).*
[c]*Reference category is authoritative parenting.*
*P < 0.05; **P < 0.01 (two-tailed tests).

enrolment beyond minimum school-leaving age. As our 15-year-old respondents turn 16, they would enter the main panel of the BHPS. This allows us to match the information they give as main panel respondents with the parenting style they report as youth panel members. In particular, we focus on the academic results they achieve in GCSE[14] and their employment status at age 17.

In the United Kingdom, a student is often considered to have achieved a good exam result if he/she obtains A* to C grade in at least five GSCE subjects (5 good GCSE in short). In our study, 40.4 per cent of our respondents obtained five good GCSE. We also consider the employment status of our respondents at age 17, contrasting those who are still in full-time education (64.3 per cent of our respondents) against those who are employed (25.0 per cent), and those who are neither in education nor employed (10.7 per cent). Table 10 shows that girls are more likely than boys to have obtained five good GCSE, and they are also more likely to stay on in full-time education rather than being employed. There is no net association between family structure and academic achievement or school enrolment at age 17. However, parent's education and social class do affect the dependent variables in the expected direction.

Controlling for family background, we still observe statistically significant associations between parenting styles on the one hand, and academic achievement or school enrolment on the other. Thus, compared with youths with authoritative parents, the odds of achieving five good GCSE is 36 per cent ($e^{-.447}-1$) lower for those with authoritarian parents, and 49 per cent ($e^{-.666}-1$) lower for youths with permissive parents. The associations with school enrolment are even stronger, with permissive parenting raising the odds of being employed rather than in full-time education by a factor of three ($e^{1.214}$). Permissive parenting is also associated with a 5-fold ($e^{1.726}$) increase in the odds of not being employed rather than in education.

Further, note that if parenting style is dropped from the regression models, the parameter estimates of class and education would remain largely unchanged.[15] For example, the estimate for class VII in the regression predicting GCSE results (see column 1 of Table 10) would be −1.122 rather than -1.164, and that for no qualification would be −1.079 rather than -1.025. Thus, parenting style is an additional factor which influences GCSE results, rather than a mediating factor which accounts for the class gap in academic achievement. This is consistent with the findings of Astone and McLanahan (1991) and Pong *et al.* (2005), but not

Table 10 Effect of parenting style on GCSE results and employment status

| | Logit | | Multinomial logit | | | |
| | 5 good GCSE | | Employed[a] | | Not employed[a] | |
	β	SE	β	SE	β	SE
Female	0.547**	0.123	−0.466**	0.147	−0.176	0.211
Single-parent[b]	0.114	0.166	−0.387	0.198	0.271	0.259
Step-families	−0.056	0.190	−0.148	0.223	0.162	0.304
Subdegree[c]	−0.282	0.193	0.609*	0.289	0.283	0.467
A-levels	−0.090	0.256	0.853*	0.349	0.568	0.560
O-levels	−0.412	0.232	0.941**	0.321	0.664	0.507
CSE/others	−0.572*	0.292	0.846*	0.382	1.417**	0.538
No qualification	−1.025**	0.269	1.092**	0.344	1.645**	0.508
II[d]	−0.286	0.189	0.207	0.257	0.064	0.432
III	−0.552**	0.195	0.569*	0.252	0.610	0.404
IV	−1.330**	0.308	0.928**	0.330	0.894	0.502
V	−1.126**	0.326	0.831*	0.360	0.391	0.568
VI	−0.999**	0.364	0.639	0.412	0.213	0.642
VII	−1.164**	0.256	0.915**	0.298	0.513	0.459
Authoritarian[e]	−0.447**	0.138	0.403*	0.168	1.111**	0.260
Permissive	−0.666**	0.176	1.214**	0.196	1.726**	0.293
Constant	0.301	0.262	−2.317**	0.354	−4.256**	0.589
N	1,289		1,172			
R^2	0.104		0.106			
Log-likelihood	−780.98		−909.54			

Note: The estimates shown are net of dummies of survey year.
[a]*As compared with being in full-time education.*
[b]*Reference category is intact two-parents families.*
[c]*Reference category is university degree.*
[d]*Reference category is class I (higher salariat).*
[e]*Reference category is authoritative parenting.*
*$P < 0.05$; **$P < 0.01$ (two-tailed tests).*

with the Wisconsin model where the role of parents and significant others, in shaping aspiration, is that of a mediating factor in the status attainment process.

Summary and discussion

In this article, we apply latent class analysis to data on parent–teenager interaction that was collected in the Youth Panel of the BHPS. The three latent classes that we identify correspond quite closely to the 3-fold typology proposed by Baumrind (1978, 1991), namely authoritative, authoritarian, and permissive parenting. Whilst the revised 4-fold typology of Maccoby and Martin (1983) makes theoretical sense, it is not supported by our data. However, it is quite possible that with a larger sample and/or further indicator variables, we would be able to distinguish indulgent parenting from neglectful parenting.

There are clear bivariate associations between parenting style on the one hand, and family structure, parental social class and parental education on the other. Authoritative parenting is relatively more prevalent in two-parents families, in salariat (class I or II) households, and in households where the parents have tertiary education. Conversely, permissive parenting is more common in single-parent families and step-families, in working class (classes V, VI, or VII) households, and in households where the parents are self-employed (class IV) or have no qualification.

However, in a multivariate framework, the association between parenting style and class, and that with education, disappear when family structure is controlled for. It bears repeating that Kohn is interested in value orientation rather than parenting style *per se*. Thus, although our results are certainly relevant to Kohn's thesis, they do not amount to a direct test of his claims. Having said that, it would appear that in

contemporary UK, parenting style is structured more by family structure than by social class or parental education. That is, if permissive or authoritarian parenting are more commonly found in working class households, it is because there are more step- or single-parent households in the working class.

Finally, there is quite clear and consistent evidence that parenting style has statistically significant and substantively large *net* associations with a wide range of youth outcome variables. It is striking that social class has no net association with teenagers' subjective well-being and self-esteem, or with their health and risky behaviour. Rather, it is parenting style that matters. Specifically, authoritative parenting is associated with higher self-esteem and subjective well-being, and lower odds of smoking, getting involved in fights, or having friends who use drug.[16]

As regards educational outcomes, where class origin and parental education are significant predictors, parenting style also has significant net associations. When compared with authoritarian or permissive parenting, authoritative parenting is associated with better GCSE results and higher odds of staying on in education beyond school-leaving age. And, as noted above, parenting style is an additional, rather than a mediating, factor of educational attainment, and given that there is no net association between parenting style and social class, one could say that parenting style is orthogonal to class.

Overall, our results are consistent with the work of child development psychologists (Baumrind, 1991; Lamborn *et al.*, 1991). It is not just supervision or discipline which counts. As we have seen, when compared with authoritative parenting, authoritarian parenting is associated with suboptimal outcomes. This might explain, to some extent, certain inconsistent findings in previous sociological research into parenting practices. Too much emphasis has been put on parental monitoring and supervision, while the dimension of acceptance or involvement has been overlooked to some degree. As a result, the distinction between authoritarian and authoritative parenting has been elided.

We plan to extend our research in several ways. First, while we have shown in broad strokes that parenting style matters, there are a lot of details to fill in. To start with, each of the three kinds of youth outcome considered in this article is a major research area, and the role of parenting style in these domains might well be subtly different. Also, there is much about parenting style that needs to be specified further. For example, how much agreement is there between parent's account and teenager's account of their

interaction pattern? And where there are two parents, do they adopt the same parenting style, and how might disconcordant parenting styles affect the child?

Secondly, while it is reasonable to think that parents shape child's outcome, child's behaviour might also influence parenting style (see note 1 above). Thus, we need to be careful about giving a causal interpretation to the associations reported above. Fortunately, the BHPS Youth Panel data have two nice features, which we have not yet exploited. The first feature is that, as a panel survey, we have multiple (up to five) observations for most youths. Secondly, some BHPS households have multiple children in the appropriate age range between 1994 and 2001. These two features allow us to control for those unobserved factors that remain constant over time for each youth, or are common between siblings within a family. By exploiting the multilevel structure of the data in a future paper, we will have a better handle in dealing with the endogeneity problem.

Thirdly, we show that parenting style varies by family structure. In a future paper, we plan to explore this result further by examining the characteristics of single-parent, step-parent, and two-parents families, e.g. their kin-support network and other aspects of the environment in which they find themselves. This should throw some light on why authoritative parenting is more commonly found in two-parents families.

Finally, we plan to replicate our analyses with other data sets, including the Longitudinal Study of Young People in England, and the Millennium Cohort Study. This will further validate our results and, in the case of the Millennium Cohort Study, allow us to explore how parenting style might vary with the child's life course.

Notes

1. This finding cautions against simplistic causal narratives about parenting practices and youth behaviour. While parenting practices might affect child's behaviour and outcome, the causal process might also go the other way, i.e. parents anticipating their children becoming sexually active might be keen to talk to them about sex.

2. The sample of Barnes and Farrell (1992) is drawn from Buffalo, New York ($N = 699$). The sample of Ennett *et al.* (2001) is drawn from across the United States. But its sample size is only 537. Finally, the sample of Bersamin *et al.* (2008) is

restricted to the San Francisco Bay Area and Los Angeles County ($N = 887$).

3. Kohn (1977, p. xl) acknowledges that this association might arise from a process of self-selection. But he thinks it more likely that the association reflects the casual influence of occupational requirements on value orientation.

4. The only comparable UK study that we know of is a school-based study in Scotland (see Shucksmith *et al.*, 1995).

5. For items 5 and 6, children living with one parent provide one set of response to the above two questions. For children living with two parents, we take the more positive response of the two.

6. Of the 2,048 cells of the uncollapsed table, 1,411 (69%) are empty cells. And even if we trichotomize indicators 2 to 6, 144 (30%) of the 486 cells of the resulting contingency tables would be empty cells. Further details available from the authors on request.

7. Thus, if there are three observed categorical variables *A*, *B*, *C* with *I*, *J*, and *K* categories, respectively, a latent class model with *T* classes can be expressed as follows:

$$\pi_{ijk}^{ABC} = \sum_{t=1}^{T} \pi_t^X \pi_{it}^{A|X} \pi_{jt}^{B|X} \pi_{kt}^{C|X},$$

where π_t^X is the probability that a person belongs to latent class *t*, $\pi_{it}^{A|X}$ is the probability that this person is found at level *i* of *A* given membership in latent class *t*, and so on.

8. The last column of Table 3 refers to the percentage of misclassified cases using the method of modal latent class assignment (Goodman, 2007), which works as follows. First, we calculate, on the basis of our preferred latent class solution (cf. Table 4), the probability of our respondents belonging to each of the three latent classes, conditional on their responses to the six indicators. All respondents with a particular response pattern are then assigned to the same latent class—that to which they have the highest, or modal, conditional probability of belonging. Unfortunately, using this assignment procedure, model 3 can be expected to misclassify 22 per cent of the respondents. This is little high and would attenuate the association between parenting style and other covariates reported below.

9. We have repeated our latent class analysis with two differently constructed samples. In our first sensitivity test, we apply latent class analysis to children aged 11–15 who were interviewed in 2001 only. In our second sensitivity test, we pool together all children of all ages interviewed between 1994 and 2001. In both cases, the results obtained are very similar to those reported here. Details are available from the authors on request.

10. In Tables 6 through 10, we control for survey years. But as these parameters are mostly non-significant, they are not reported here.

11. This result still applies if either parent's class *or* parent's education is dropped from the model.

12. We have also tried other statistical models, such as the ordinal logit, and have obtained very similar results. Details are available from the authors on request.

13. We have tried different cutoffs for these two dependent variables, and in relation to 'fighting', we have also tried different statistical models, such as the multinomial logit and the ordinal logit. In all these sensitivity tests, the results obtained are very similar to those reported here. Details are available from the authors on request.

14. GCSE stands for General Certificate of Secondary Education. It is a public exam taken at the end of secondary education, usually at age 16. Scotland has its own education system. Where appropriate, we consider the Scottish equivalent of GCSE in the following analysis.

15. Details are available from the authors on request.

16. Recent neuroscience research suggests that parent–teenager interaction is associated with the development of particular brain structure among adolescents, which might then have long-term implications for mental health outcomes (Whittle *et al.*, 2008).

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