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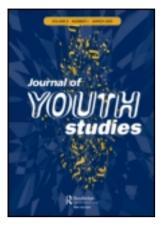
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Consumerism and well-being in early adolescence

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Consumerism and well-being in early adolescence

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It has been suggested that consumerism is negatively related to well-being in children and adolescents, as well as adults. Few studies have explored whether certain aspects of consumerism have stronger associations with well-being than others, or between-group differences in associations. This article uses data from a sample of early adolescents to examine: levels of consumerism; relationships between different aspects of consumerism and well-being; and differences according to gender, school year group and family affluence. Data were obtained in 2010 via secondary school pupil surveys (N = 2934). Consumerism measures comprised number of 'standard' and 'premium' possessions and four dimensions of consumer involvement; well-being measures comprised self-esteem, psychological distress and anger. There was evidence of high penetration of consumerist values. There were positive associations between number of possessions and anger, and between 'dissatisfaction' and poorer well-being, regardless of how measured. 'Brand awareness' was associated with positive male well-being, but negative female well-being. Many relationships between consumerism and wellbeing were stronger than those between family affluence and well-being. These results suggest only certain aspects of consumerism are associated with poorer adolescent well-being. Although, for some sub-groups, other aspects might be associated with better well-being, there was no evidence that modern consumer goods promote happiness.

Keywords: consumerism; adolescent; psychological well-being; anger; sex differences; socio-economic status

Introduction

Consumerism or materialism¹, referring to conspicuous consumption or beliefs that goods are a means to happiness generally or personally, has been highlighted as one of today's 'social evils' (Joseph Rowntree Foundation 2009) and as detrimental to health and well-being (Eckersley 2006, 2011). This study examines levels of several different dimensions of consumerism and associations between these measures of consumerism and psychological well-being in a large sample of Scottish early adolescents. We begin by describing scales which measure the concept of consumerism, their associations with well-being, and differences according to gender and socio-economic status (SES). The majority of work on consumerism has focused on adults (Bottomley *et al.* 2010), and a glance at the references for this article shows that most of the literature in this area has been located in consumerism or marketing journals rather than those relating to young people. This is despite the fact that the

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impact of modern consumer culture is likely to be most marked among young people (Eckersley 2011).

Among adults, an early study (Belk 1984) examined three measures, possessiveness, non-generosity and envy. Subsequently, scales were developed reflecting beliefs that possession of goods is a means to happiness and life satisfaction (Richins 1987, 2004). Much subsequent work has been based on the Belk and Richins scales. A slightly different approach is represented by an index of aspirations, allowing identification of those who value financial success above other aspirations such as self-acceptance (Kasser and Ryan 1993).

Among adolescents, a study of 'consumer learning' used a brief scale to measure an 'orientation emphasising possessions and money for personal happiness and social progress' (Ward and Wackman 1971, p. 426). Studies of American adolescents conducted since 2000 have developed a 10-item 'Youth Materialism Scale' for 9–14 year olds (Goldberg *et al.* 2003) and an 18-item 'Consumer Involvement Scale' comprising a broad range of consumer attitudes, values and activities for 10–13 year olds (Schor 2004). While these scales measure consumerism as a personality attribute and/or value, a more recent study of 8–18 year olds measured the concept via the number of material possessions (e.g. 'money', 'new clothes', 'my own cell phone') included on a collage of things which 'make you happy' (Chaplin and John 2007).

It has been suggested that a consistent finding from this stream of research is that consumerism is negatively related to overall life satisfaction (Sirgy 1998). In adult samples, higher levels of possessiveness, non-generosity and envy have been associated with reduced happiness and satisfaction (Belk 1984), general affect (La Barbera and Gurhan 1997) and emotional well-being (Kashdan and Breen 2007). Negative relationships have also been found between consumerism and both life satisfaction and self-esteem (Richins and Dawson 1992, Christopher *et al.* 2007). In addition, among young adults, those valuing financial success above other aspirations have been found to have poorer well-being, assessed both via self-report and structured psychiatric interview (Kasser and Ryan 1993).

Focusing on children and adolescents, American studies have found relationships between consumerism and psychosomatic symptoms, depression, anxiety and lower self-esteem in 9–13 year olds (Schor 2004), increased anxiety and reduced happiness and self-esteem in 10–18 year olds (Kasser 2005) and reduced self-esteem in 8–18 year olds (Chaplin and John 2007). In UK studies, consumerism was found to be related to increased self-reported emotional and behavioural problems in 11–19 year olds (Flouri 2004) and to lower self-esteem and higher parent–child conflict among 9–13 year olds (Nairn *et al.* 2007). Consumerism was also associated with parent–child conflict and disappointment in Dutch 8–12 year olds (Buijzen and Valkenburg 2003), while agreement with statements such as 'I'd be happier if I could afford to buy more things' was negatively related to life satisfaction among Hungarian 14–21 year olds (Piko 2006).

Most studies of children and adolescents reporting on gender differences in consumerism describe higher levels among males (Churchill and Moschis 1979, Goldberg *et al.* 2003, Flouri 2004, Kasser 2005), although one found no gender difference (Nairn *et al.* 2007). Results in respect of age are inconsistent. Some report no differences in levels according to either age or school grade (Ward and Wackman 1971, Goldberg *et al.* 2003, Kasser 2005). However, studies have variously found: a positive relationship between consumerism and age among 11–19 year olds

(Flouri 2004); that consumerism increased from middle childhood to early adolescence then declined in late adolescence (Chaplin and John 2007); that pupils in the final two years of (UK) primary schooling reported more consumerism than those in the first two years at secondary school (Nairn *et al.* 2007); and that high status brands become particularly important as children move into secondary school (UNICEF UK/Ipsos Mori 2011).

Findings in respect of SES appear more consistent. Thus, in American studies, more consumer-oriented 18 year olds were found to have grown up in less advantageous socio-economic circumstances (Kasser et al. 1995), 9-14 year olds with the highest levels of consumerism tended to be drawn from families with lower incomes (Goldberg et al. 2003) and 9-13 year olds from less well-off families displayed higher levels of consumer involvement (Schor 2004). Similarly, in the UK, consumerism scores were higher among 14-16 year olds from working class, compared with middle class-backgrounds (Dittmar and Pepper 1994) and among 9-13 year olds from deprived compared with affluent areas (Nairn et al. 2007). It has been suggested that levels of consumerism are higher among more disadvantaged children and adolescents because they feel insecure about themselves (Isaksen and Roper 2012). Such ideas draw from earlier literatures describing SES differences in responses to material rather than symbolic rewards (Douvan 1956), an emphasis on the present rather than planning ahead (Hoggart 1957) and a focus on material goods rather than experience (Martineau 1958). An alternative explanation is that since material possessions are more readily available to advantaged groups, they are not perceived as particularly prestigious (Belk et al. 1984).

Despite this evidence of between-group differences in levels of consumerism, few studies have explored whether there are also between-group differences in the relationships between consumerism and well-being. The UK study of 9–13 year olds which found consumerism to be related to self-esteem and parent—child conflict found 'some differences in strength of association' according to gender and SES, but does not report these in detail (Nairn *et al.* 2007). There is some evidence from adults that consumerism has a stronger association with poorer well-being among those with lower incomes or less education (La Barbera and Gurhan 1997, Burroughs and Rindfleisch 2002). It has been suggested that pressures to consume may result in a damaged self-concept among low-income adolescents who cannot keep up with the latest trends (Isaksen and Roper 2008). In line with this, studies of UK 8–13 and 15–16 year olds have concluded that visible, high status brands are more important to those from less affluent backgrounds (UNICEF UK/Ipsos Mori 2011, Isaksen and Roper 2012).

Further, although most studies report on relationships between an overall consumerism score and well-being, certain aspects may have stronger associations than others. For example, there is evidence that while personal consumerism ('I'd be happier if ...') is associated with reduced well-being in both adults and adolescents, more general beliefs ('it's really true money can buy happiness') are not (Richins 1987, Piko 2006). Although measures of possessiveness, non-generosity and envy are generally combined into a single scale, one adult study found that possessiveness had weaker relationships with unhappiness than the other two dimensions (Belk 1984), and another that envy had a stronger relationship with affect than did non-generosity (La Barbera and Gurhan 1997). Similarly, analyses based on one of the measures used in this article found that while 'dissatisfaction' had a strong

relationship with depression and anxiety among US 9–13 year olds (Schor 2004) and with self-esteem among US 11–15-year-old females (Bottomley *et al.* 2010), relationships between 'consumer orientation' or 'brand awareness' and these measures of well-being were weaker (Schor 2004) or non-existent (Bottomley *et al.* 2010).

This article examines levels of consumerism and associations between different aspects of consumerism (ownership of material possessions and measures of consumer involvement) and well-being (self-esteem, psychological distress and anger) among a large sample of Scottish school pupils in the first three years of secondary education (mean ages 12, 13 and 14 years). Given the possibility that high status brands may be particularly important for lower SES groups (Isaksen and Roper 2008, UNICEF UK/Ipsos Mori 2011, Isaksen and Roper 2012), our measures of consumerism include both 'standard' and more desirable 'premium' possessions. Further, we include four dimensions of consumer involvement ('brand awareness', 'dissatisfaction', 'consumer orientation' and 'consumer indifference') since there is evidence that certain aspects of consumer involvement may have stronger associations with well-being than others. Well-being is represented by self-esteem, psychological distress and a simple measure of anger. Differences in both levels of material possessions and consumer involvement and in the relationship between these measures and well-being are examined according to gender, school year (as a proxy for both age and the influence of peers (Nairn et al. 2007)) and family affluence. Finally, multivariate analyses allow comparison of the independent associations which both family affluence and consumerism have with well-being.

Methods

Sample

Data are drawn from a survey of Scottish Secondary school pupils conducted in 2010. The study was approved by the relevant Glasgow University Ethics Committee, local education authorities and schools. To maximise representativeness, we selected schools with different socio-economic catchments (as indicated by the proportion in receipt of free school meals) from two urban and semi-rural areas in Scotland's central belt. Within the seven selected schools, all pupils in Secondary 1–3 (S1–S3) year groups were initially invited to participate via letters to their parents enclosing parental opt-out consent forms. Pupils separately received information about the study and consented prior to participation.

Pupils filled in a questionnaire in examination-type conditions during school-based sessions. The sample comprised 1496 males and 1438 females (92% of the eligible sample of 3189). Levels of non-consent were very low; almost all non-responders were those absent on the survey days. Mean (SD) ages were 12.0 (0.33) years in S1, 13.0 (0.29) in S2 and 14.0 (0.34) in S3.

Measures

Material possessions

Informal discussions with early adolescents during questionnaire development generated a list of 12 possessions which they considered desirable. Pupils indicated

whether they owned each item on the list. For the purpose of analysis, more expensive or recently released items were categorised as 'premium' (Xbox 360, PS3 or Wii; PSP; iPod or iPhone; iPod dock; own laptop; LCD TV in bedroom; touch screen mobile phone – range = 0-7, mean = 4.1, standard deviation = 1.7) and the remaining items as 'standard' (any other games console; any other MP3 player; own PC; any other TV in bedroom; any other mobile phone – range = 0-5, mean = 2.7, standard deviation = 1.2).

Consumer involvement

Pupils completed 16 items based on the 'Consumer Involvement' scale administered to around 300 American 10–13 year olds by Schor (2004). We included the 16 (of 18 original) items which Schor found grouped into a single factor (with three further sub-factors) (Table 2). Pupils indicated agreement with each item via a 4-point scale.

Well-being

Pupils completed a 10 item *self-esteem scale* (based on Rosenberg (1965)), including items such as 'I am pretty sure of myself', with a 4-point response, summed to produce a total score (possible range 0–36; actual range 2–30). For the purposes of analysis, pupils scoring 17 or below (26.8%) were categorised as 'lower self-esteem'. To measure psychological distress, pupils completed the *12-item General Health Questionnaire* (*GHQ-12*) which has been validated for use with younger adolescents (Tait *et al.* 2003). The GHQ was designed as a measure of state, focusing on inability to carry out normal functions (e.g. 'been able to enjoy your normal day-to-day activities') and emergence of distressing symptoms (e.g. 'felt constantly under strain'). Each item includes four answer options. We used binary scoring (0-0-1-1) and the standard cut-off, which is a score of three or above (Goldberg and Williams 1988). This classified 21.3% as GHQ 'cases' (potentially clinically significant levels of distress). To represent *anger*, responses to a single item ('I get angry when anybody tells me what to do') were dichotomised into 'describes me very/quite well' (18.3%) and 'describes me a bit/not at all'.

Family Affluence Scale (FAS)

This scale, originally developed for use by the International Health Behaviour in School-Aged Children Study (Currie *et al.* 2008) includes items in respect of: number of family cars, vans or trucks; having own (not shared) bedroom; number of family computers; and number of family holidays in the past year. It was collapsed into low (scale scores 0–3), mid (4–5) and high (6–7) categories.

Analyses

Descriptive statistics for material possessions and the Consumer Involvement Scale were examined first. Preliminary unconstrained factor analyses (principal components analysis, varimax rotation) of all 16 items in the Consumer Involvement Scale found inconsistent results for gender, school year and FAS sub-groups. However,

when two items ('I like shopping'; 'I wish my parents earned more money') which Schor reported as not closely connected with any of the sub-scales (Schor 2004) were removed, unconstrained factor analyses produced a four-factor solution which was very similar in each sub-group (detailed results available on request). Factor analysis was therefore based on 14 items, conducted on the whole sample and the resulting four-factor scores saved. Since analyses by both Schor (2004) and, more recently by Bottomley *et al.* (2010) of both US and UK samples, had indicated a three-factor structure, additional confirmatory factor analyses were conducted. These indicated that the four-factor model based on 14 items ($\chi^2 = 670.6$, df = 71, CFI = 0.928) fitted our data significantly better than a three-factor model based on either 14 items ($\chi^2 = 844.6$, df = 74, CFI = 0.907) or on Schor's original 16 items ($\chi^2 = 1250.6$, df = 101, CFI = 0.891) (detailed results available on request).

Analyses of variance examined differences in material possessions and the consumerism factor scores by gender, school year group and FAS.

Logistic regression was used to determine the associations which number of material possessions and each of the four consumer involvement factor scores had with low self-esteem, GHQ 'caseness' and anger. Since there was some evidence of interactions with gender, separate analyses were conducted for males and females. We report both unadjusted and mutually adjusted relationships, the latter also controlling for year group and FAS. All logistic regression analyses were conducted on those with complete data on all relevant variables, reducing the sample sizes to 2599 (low self-esteem), 2637 (GHQ) and 2699 (anger).

Results

On average, pupils owned 6.8 (SD = 2.0) of the 12 material possessions; 1.2% had 2 or fewer, 10% 10 or more. Around 90% had an Xbox 360, PS3 or Wii, almost three quarters any other games console and over half an MP3 player, laptop, LCD TV in their bedroom, iPod dock and/or non-touch screen mobile. Even the least popular, a PC, was possessed by over a third of the sample. Table 1 shows ownership of each possession according to gender and FAS. Five items were more likely to be owned by males (Xbox 360, PS3 or Wii; PSP; LCD Tv; PC; other mobile) and five by females (iPod dock; laptop; touch screen phone; other games console; other MP3 player) with no gender differences in respect of two items (iPod touch or iPhone; other TV). With the exception of two 'standard' items (other TV in bedroom; other mobile), all were most likely among those from high FAS households, particularly 'premium' items such as an iPod touch or iPhone (23% low FAS, 50% high FAS), iPod dock (23% and 67%) and own laptop (44 and 69%).

Table 2 shows responses to the Consumer Involvement Scale. Although around 80% (strongly) agreed that 'I have pretty much everything I need I terms of possessions', around a third wished their parents gave them more money to spend and that their parents earned more, a quarter felt other kids had more 'stuff' and a fifth wished their family could afford to buy them more. However, over 90% claimed not to care what others had when deciding who to be friends with. Almost all (96%) wanted to make a lot of money when they grew up, and the vast majority usually had a new acquisition in mind (86%), liked shopping (78%), buying souvenirs (80%) and cared a lot about their own possessions (80%). Only a quarter claimed not to care about their clothes (28%), around half believed that being cool (47%)

Table 1. Material possessions according to gender and family affluence – percentages with chi-square (and significance).

	Gender				Family affluence			
	Chi-square Males Females (significance)		Low	Mid	High	Chi-square (significance)		
'Premium' possessions								
An Xbox 360, PS3 or Wii	96.8	85.8	110.9 (0.000)	84.5	90.4	93.5	27.0 (0.000)	
A PSP	58.2	25.3	323.9 (0.000)	38.6	38.4	45.4	14.1 (0.001)	
An iPod touch or iPhone	42.8	42.0	0.2 (0.666)	22.7	37.9	49.7	86.0 (0.000)	
An iPod dock	49.9	59.9	29.5 (0.000)	22.7	47.3	66.8	227.5 (0.000)	
Your own laptop	53.1	68.0	67.8 (0.000)	43.9	53.7	68.8	96.3 (0.000)	
LCD TV in your	62.1	51.1	36.0 (0.000)	40.2	54.6	61.6	46.8 (0.000)	
bedroom								
A touch screen phone	52.2	68.1	76.6 (0.000)	43.5	59.3	63.9	40.9 (0.000)	
'Standard' possessions								
Any other games console	69.2	76.5	19.5 (0.000)	67.9	70.5	75.5	11.7 (0.003)	
Any other MP3 player	64.5	72.3	20.7 (0.000)	60.1	67.0	70.8	13.7 (0.001)	
Your own PC	40.5	33.1	17.3 (0.000)	29.5	33.0	41.5	27.3 (0.000)	
Any other TV in your	43.7	42.7	0.2 (0.619)	58.8	46.6	37.5	52.4 (0.000)	
bedroom								
Any other mobile	59.3	45.2	57.9 (0.000)	60.3	51.3	51.5	7.9 (0.019)	

and brand names (59%) were important and two-thirds liked clothes with popular labels (69%). However, three quarters did not care what sort of car their family had.

Schor (2004) identified three consumer involvement sub-factors which she labelled 'dissatisfaction' (items 1–5 in Table 2), 'consumer orientation' (items 6–9) and 'brand awareness' (items 10–14); items 15 and 16 were not closely connected with these sub-scales. Our factor analyses suggested four factors (Table 3), three of which were the same or similar to those identified by Schor, and given the same labels. The fourth factor, representing only two items ('When I decide who to be friends with, I don't care what toys or stuff the person has' and 'It doesn't matter to me what kind of car my family has') was labelled 'consumer indifference'. 'Brand awareness' explained 23% of the total variance; 'dissatisfaction' 15%; 'consumer orientation' 11%; and 'consumer indifference' 7% (total variance explained = 56%).

Correlations between number of possessions and each of the consumer involvement factor scores were generally modest ('brand awareness' with 'standard' items r = 0.022, p = 0.260, with 'premium' items r = 0.317, p = .000; 'dissatisfaction' with 'standard' r = 0.014, p = 0.477, with 'premium' r = -0.168, p = 0.000; 'consumer orientation' with 'standard' r = .108, p = .000, with 'premium' r = 0.124, p = 0.000; 'consumer indifference' with 'standard' r = 0.012, p = 0.546, with 'premium' r = -0.050, p = 0.008). Thus, while number of 'premium' possessions was related positively to 'brand awareness' and negatively to 'dissatisfaction', number of 'standard' possessions was not related to either. Numbers of both types of possessions had a very weak positive relationship with 'consumer orientation' but no relationship with 'consumer indifference'. The four consumer involvement scores were unrelated to each other, reflecting their derivation via factor analysis.

Table 2. Responses to consumerism scale items – percentages.

	Strongly disagree	Disagree	Agree	Strongly agree
1. I feel like other kids have more stuff than I do	15.6	59.5	21.0	3.9
2. I wish my family could afford to buy me more of what I want	29.8	50.0	16.1	4.1
3. I have pretty much everything I need in terms of possessions	3.0	14.2	53.6	29.2
4. I wish my parents gave me more money to spend	17.5	45.6	27.4	9.5
5. When I decide who to be friends with, I don't care what toys or stuff the person has	3.0	5.5	33.7	57.8
6. I usually have something in mind I want to buy or get	1.7	12.0	53.9	32.4
7. I want to make a lot of money when I grow up	0.6	3.7	35.2	60.5
8. I care a lot about my games, toys and other possessions	2.5	17.8	52.4	27.3
9. When I go somewhere special I usually like to buy something	1.6	18.9	51.6	27.9
10. I don't care too much about what I wear	30.2	41.4	20.6	7.7
11. Brand names matter to me	11.1	30.1	38.8	20.1
12. I like clothes with popular labels	7.6	23.3	43.1	25.9
13. Being cool is important to me	9.2	43.7	35.1	12.0
14. It doesn't matter to me what kind of car my family has	7.1	19.9	48.0	25.0
15. I like shopping and going to stores	5.4	16.8	40.1	37.7
16. I wish my parents earned more money	23.2	43.8	21.5	11.4

As Table 4 shows, 13 of the 18 comparisons examining differences in material possessions and the consumerism factor scores according to gender, year group and FAS were significant. However, most effect sizes were very small, only two (FAS differences in 'premium' possessions and 'dissatisfaction') with partial eta squared >0.02. Number of 'premium' possessions and the consumer involvement factors 'brand awareness', 'dissatisfaction' and 'consumer orientation' were higher among males, while 'consumer indifference' was lower. The S2 year group had the highest number of both 'standard' and 'premium' possessions, while 'brand awareness' and 'dissatisfaction' were highest among the oldest year group (S3s). Finally, reflecting responses in respect of the individual possessions, FAS was unrelated to number of 'standard' items, but positively associated with number of 'premium' items. FAS was also positively related to both 'brand awareness' and 'consumer orientation', and negatively to 'dissatisfaction'.

Logistic regression analyses examined associations which material possessions and consumer involvement had with the three well-being measures. First, to determine whether associations differed by gender, a series of models entered: 'standard' possessions, gender, 'standard' possessions by gender; 'premium' possessions, gender, 'premium' possessions by gender; etc, for each outcome (i.e. 18 models). Of these, four interactions with gender were significant ('standard' possessions by gender in respect

Table 3. Factor analysis (varimax) of consumer items – variance explained and rotated component matrix.

	Extraction communalities	1	2	3	4
Percentage of variance explained		22.5	14.8	11.1	7.3
'Brand awareness'					
I like clothes with popular labels	0.752	0.843	0.058	0.193	-0.007
Brand names matter to me	0.695	0.817	0.063	0.153	-0.017
Being cool is important to me	0.552	0.701	0.126	0.210	0.023
I don't care too much about what	0.375	-0.570	0.160	0.015	0.155
I wear					
'Dissatisfaction'					
I wish my family could afford to	0.730	0.046	0.847	0.094	-0.052
buy me more of what I want					
I feel like other kids have more	0.604	-0.018	0.774	-0.011	0.071
stuff than I do					
I wish my parents gave me more	0.590	0.074	0.728	0.233	0.021
money to spend					
I have pretty much everything I	0.414	0.062	-0.476	0.140	0.405
need in terms of possessions					
'Consumer orientation'					
I care a lot about my games, toys	0.485	-0.058	-0.032	0.693	0.022
and other possessions					
I want to make a lot of money	0.524	0.219	0.037	0.682	0.097
when grow up					
I usually have something in mind	0.521	0.160	0.200	0.672	0.057
I want to buy or get					
When I go somewhere special I	0.432	0.209	0.041	0.621	-0.032
usually like to buy something					
'Consumer indifference'					
When I decide who to be friends	0.582	-0.003	-0.061	0.076	0.757
with, I don't care what toys or					
stuff the person has					
It doesn't matter to me what kind	0.527	-0.138	0.069	-0.019	0.709
of car my family has					

of low self-esteem, p = 0.033, and 'brand awareness' by gender in respect of each measure of well-being, p < 0.001) (Table 5). The exercise was repeated, replacing gender with year group (no significant interactions) and FAS (one significant interaction – 'standard' possessions by FAS in respect of low self-esteem, p = 0.022). Given evidence of some consistent gender differences, subsequent analyses were conducted separately for males and females.

Table 5 shows the associations which year group, FAS, possessions and the consumerism factors had with the well-being measures amongst males and females; unadjusted and mutually adjusted odds ratios are presented for each. Focusing first on the relationships which year group and FAS had with well-being, the odds of low self-esteem increased with year group among females, and were also somewhat higher among pupils from low compared with high FAS backgrounds. GHQ 'caseness' increased with year group in both males and females and, among males only, was

Table 4. Number of material possessions and consumer factor scores according to gender, year group and family affluence.

	Standard possessions	Premium possessions	Brand awareness	Dissatisfaction	Consumer orientation	Consumer indifference
Gender						
Male	2.77	4.15	0.050	0.049	0.129	-0.062
Female	2.70	4.00	-0.050	-0.050	-0.132	0.065
F (significance)	2.5 (0.117)	5.7 (0.017)	7.0 (0.008)	6.8 (0.009)	48.5 (0.000)	11.2 (0.001)
Partial eta squared	0.001	0.002	0.003	0.002	0.017	0.004
Year group						
First year (age 12)	2.77	3.89	-0.098	-0.092	-0.001	-0.003
Second year (age 13)	2.79	4.18	0.043	-0.026	0.031	-0.002
Third year (age 14)	2.63	4.15	0.047	0.110	-0.031	0.006
F (significance)	4.8 (0.009)	8.0 (0.000)	6.2 (0.002)	10.0 (0.000)	0.9 (0.410)	0.0 (0.975)
Partial eta squared	0.003	0.005	0.004	0.007	0.001	0.000
Family affluence						
Low	2.77	2.97	-0.133	0.345	-0.149	-0.025
Medium	2.68	3.82	-0.085	0.098	-0.022	0.038
High	2.76	4.49	0.093	-0.134	0.049	-0.025
F (significance)	1.5 (0.213)	118.6 (0.000)	12.4 (0.000)	34.4 (0.000)	4.8 (0.008)	1.3 (0.264)
Partial eta squared	0.001	0.076	0.009	0.024	0.003	0.001

lower among those from more affluent households. The tendency to get angry did not show consistent or significant patterns with year group or FAS. Examination of the Wald statistic shows that relationships between FAS and well-being were weaker than many of those between the measures of consumerism and well-being. This was particularly the case among females and in respect of anger.

'Standard' and 'premium' items showed somewhat different relationships with the three well-being measures. Relationships between possessions and both low self-esteem and GHQ caseness were generally weak, although owning more 'standard' possessions was associated with significantly increased odds of low self-esteem among females, and of GHQ 'caseness' among males. Anger showed a consistent relationship with possessions; amongst both males and females (in both unadjusted and adjusted analyses) the odds of anger were significantly elevated amongst those with more 'standard' and 'premium' possessions.

There were gender differences in the relationships between 'brand awareness' and each of the three well-being measures. Higher 'brand awareness' was associated with decreases in the odds of both low self-esteem and GHQ 'caseness' amongst males, but increases in adjusted analyses amongst females, and with a much smaller increase in anger amongst males than females.

Higher levels of 'dissatisfaction' were consistently associated with increased odds of low self-esteem, GHQ 'caseness' and anger in both males and females (unadjusted and adjusted analyses), and the Wald statistic confirmed that for each well-being measure, this had the strongest relationship out of all the consumer involvement factors. 'Consumer orientation' and the 'consumer indifference' factor showed few or no relationships with the measures of well-being in these young people. The only statistically significant relationship in mutually adjusted analyses was increased odds of anger amongst females with greater 'consumer orientation'.

Additional analyses (not shown), based on the mutually adjusted models, explored the 'standard' possessions by FAS interaction observed for low self-esteem in unadjusted analysis of the whole sample (described earlier). Among males, the 'standard' possessions by FAS interaction in the mutually adjusted model was non-significant (p = 0.201). Among females, the interaction was significant (p = 0.025) and the associations were OR = 0.62 (95% CI = 0.41-0.94) in those from low; OR = 1.32 (1.11–1.56) in those from mid; and OR = 1.21 (1.04–1.41) in those from high family affluence backgrounds. Thus, more 'standard' items were associated with *higher* self-esteem among the least affluent females, but *lower* self-esteem among those from more affluent backgrounds (the same pattern occurred for males, but relationships were weaker).

Discussion

Almost all this sample of contemporary western early adolescents possessed large numbers of electronic gaming, media and communication devices, yet most demonstrated a strong 'consumer orientation' in terms of wanting to acquire more and a minority expressed 'dissatisfaction' with levels of possessions or disposable income. A major focus of this article was associations between consumerism and well-being. We found the different dimensions of consumerism were associated with different aspects of adolescent well-being in different ways and to different degrees. Many of the relationships were stronger than those between family affluence and

				Mutua	lly adjus	ted associations		
	Unadjusted associations			Males		Females		
	Males OR (95% CIs)	Females OR (95% CIs)	Signifance of interaction with gender	OR (95% CIs)	Wald	OR (95% CIs)	Wald	
'Low' self-esteem								
First year (age 12)	1.00	1.00		1.00		1.00		۷
Second year (age 13)	0.86 (0.60-1.25)	1.70 (1.27–2.27)	0.005	0.87 (0.59-1.28)	0.5	1.56 (1.15-2.12)	8.0	n
Third year (age 14)	1.26 (0.89-1.78)	2.04 (1.53-2.72)	0.035	1.26 (0.88-1.81)	1.6	1.82 (1.34-2.47)	14.6	nn.
Low-family affluence	1.00	1.00		1.00		1.00		.0
Mid-family affluence	0.70 (0.46-1.09)	$0.70 \ (0.47 - 1.06)$	0.989	0.74 (0.47–1.17)	1.7	0.89 (0.57 - 1.41)	0.2	_
High-family affluence	0.42 (0.27-0.66)	0.69 (0.46-1.03)	0.108	0.50 (0.31-0.80)	8.4	0.99 (0.63-1.57)	0.0	10.
Standard possessions	1.01 (0.91-1.13)	1.19 (1.08–1.31)	0.033	1.05 (0.93-1.18)	0.6	1.19 (1.07–1.33)	10.6	111
Premium possessions	0.92 (0.85-0.99)	0.97 (0.91-1.04)	0.294	1.05 (0.95–1.15)	0.9	1.03 (0.95-1.11)	0.4	70
Brand awareness	0.82 (0.72-0.95)	1.19 (1.06–1.34)	0.000	0.83 (0.71-0.96)	5.9	1.11 (0.97–1.27)	2.2	ии
Dissatisfaction	1.81 (1.56-2.10)	2.13 (1.86-2.43)	0.116	1.78 (1.52-2.08)	52.8	2.09 (1.82-2.40)	109.5	ies
Consumer orientation	0.91 (0.79-1.05)	1.03 (0.92-1.16)	0.179	0.88 (0.76–1.03)	2.6	0.98 (0.86-1.11)	0.2	
Consumer indifference	0.94 (0.82-1.07)	0.88 (0.79-0.99)	0.498	0.94 (0.82-1.09)	0.6	$0.88 \ (0.77-1.00)$	3.8	
Nagelkerke R^2				0.107		0.181		
N				1306		1293		
GHQ-12 'caseness'								
First year (age 12)	1.00	1.00		1.00		1.00		
Second year (age 13)	1.29 (0.88-1.90)	1.29 (0.94–1.78)	1.000	1.33 (0.89–1.98)	1.9	1.14 (0.82-1.60)	0.6	
Third year (age 14)	1.60 (1.10-2.34)	2.35 (1.73–3.19)	0.123	1.67 (1.14-2.47)	6.8	2.03 (1.48-2.79)	19.2	
Low-family affluence	1.00	1.00		1.00		1.00		
Mid-family affluence	0.63 (0.40-0.99)	0.75 (0.48-1.17)	0.581	0.66 (0.41-1.05)	3.0	0.97 (0.60-1.58)	0.0	
High-family affluence	0.43 (0.27–0.67)	0.84 (0.54–1.29)	0.037	0.47 (0.29-0.76)	9.3	1.18 (0.73–1.91)	0.4	01

				Mutua	lly adjus	ted associations	
	Unadjusted associations			Males		Females	
	Males OR (95% CIs)	Females OR (95% CIs)	Signifance of interaction with gender	OR (95% CIs)	Wald	OR (95% CIs)	Wald
Standard possessions	1.17 (1.04–1.31)	1.05 (0.94–1.16)	0.170	1.18 (1.05–1.33)	7.2	1.04 (0.93–1.16)	0.5
Premium possessions	0.95 (0.87-1.03)	1.01 (0.94-1.09)	0.230	1.05 (0.95–1.15)	0.9	1.05 (0.96-1.14)	1.1
Brand awareness	0.83 (0.72-0.96)	1.17 (1.03–1.33)	0.000	0.84 (0.72-0.99)	4.5	1.09 (0.95-1.26)	1.4
Dissatisfaction	1.55 (1.33-1.80)	1.84 (1.61-2.10)	0.087	1.51 (1.29–1.76)	27.2	1.82 (1.59-2.09)	72.5
Consumer orientation	1.13 (0.97–1.32)	1.08 (0.95-1.22)	0.632	1.10 (0.94–1.28)	1.3	1.06 (0.92-1.21)	0.6
Consumer indifference	0.91 (0.80-1.05)	0.96 (0.85-1.09)	0.595	0.91 (0.78-1.05)	1.7	0.98 (0.85-1.12)	0.1
Nagelkerke R^2				0.083		0.130	
N				1322		1315	
Get angry							
First year (age 12)	1.00	1.00		1.00		1.00	
Second year (age 13)	0.55 (0.38-0.78)	1.50 (1.06-2.12)	0.000	0.50 (0.34-0.71)	14.2	1.30 (0.91–1.86)	2.0
Third year (age 14)	0.87 (0.63 - 1.20)	1.37 (0.97–1.94)	0.057	0.82(0.59-1.14)	1.4	1.20 (0.83–1.73)	1.0
Low-family affluence	1.00	1.00		1.00		1.00	
Mid-family affluence	0.64 (0.41 - 1.01)	0.81 (0.50-1.31)	0.488	0.54 (0.34-0.86)	6.7	0.82(0.49-1.37)	0.6
High-family affluence	0.68 (0.44–1.05)	0.67 (0.41–1.07)	0.950	0.52 (0.33–0.83)	7.5	0.61 (0.36–1.04)	3.3
Standard possessions	1.24 (1.11–1.38)	1.20 (1.07–1.36)	0.740	1.26 (1.13–1.41)	16.2	1.17 (1.04–1.33)	6.3
Premium possessions	1.11 (1.03–1.21)	1.11 (1.03–1.21)	0.964	1.18 (1.08–1.29)	12.6	1.10 (1.00–1.21)	3.9
Brand awareness	1.15 (0.99–1.32)	1.65 (1.42–1.91)	0.000	1.11 (0.96–1.29)	2.0	1.53 (1.31–1.80)	27.6
Dissatisfaction	1.28 (1.12-1.47)	1.52 (1.32–1.74)	0.092	1.33 (1.15–1.53)	15.4	1.46 (1.26–1.68)	26.6
Consumer orientation	1.19 (1.03–1.37)	1.35 (1.17–1.56)	0.217	1.12 (0.97–1.30)	2.3	1.31 (1.12–1.53)	11.7
Consumer indifference	0.99 (0.87–1.13)	0.96 (0.83–1.11)	0.775	0.98 (0.85–1.13)	0.1	1.00 (0.86–1.16)	0.0
Nagelkerke R^2	,	,		0.078		0.123	
N				1357		1342	

well-being. The clearest relationships between number of possessions (regardless of type) and well-being occurred in respect of anger. Associations with 'brand awareness' differed by gender. Consumerist 'dissatisfaction' showed the strongest relationships with well-being, while 'consumer orientation' and 'consumer indifference' had weaker, or no relationships with well-being. We discuss findings relating to levels of possessions and consumer involvement and their socio-demographic patterning first.

Social inequalities existed not so much in terms of whether these early adolescents owned a games console, computer, TV or phone, since almost all did, but rather in terms of items categorised for analytic purposes as 'premium'. However, even though the more affluent possessed more items which were expensive, recently released and/ or had additional features, these were also possessed by a large minority of the less affluent. Such items were associated with 'brand awareness', and may have enhanced their owners' peer status (Lease et al. 2002, Meisinger et al. 2007). Although over 80% of the sample felt they had 'pretty much everything I need in terms of possessions', the relationship between (more) 'premium' possessions and (less) 'dissatisfaction' was relatively weak; not all with large amounts of desirable 'stuff' felt satisfied with what they had, and over three quarters of the sample usually had a new acquisition in mind. Interestingly, there was no association between number of 'standard' possessions and either 'brand awareness' or 'dissatisfaction'. It may be that among western adolescents, such non-premium items now have little meaning.

Responses in respect of the 'Consumer Involvement' scale from this sample of Scottish 11-14 year olds in 2010 can be compared with those obtained from American 10-13 year olds in 2001-2002 (Schor 2004). The American sample expressed higher rates of dissatisfaction via responses to 'other kids have more stuff' and wishing their family could afford to buy more or that their parents gave them more money, but appeared less interested in brands, labels and 'cool'. It remains open to speculation whether the variation represents cultural (USA vs. Scotland) or secular (2001–2002 vs. 2010) differences. Our factor analysis suggested almost identical dimensions to those obtained from previous US and UK samples (Schor 2004, Bottomley et al. 2010), with the addition of a fourth factor which we termed 'consumer indifference'. However, it is possible this reflects something else. It included only two items, both of which were shown to have very low loadings on oneand three-factor scale solutions in another study (Bottomley et al. 2010). Unlike the other Consumer Involvement Scale items, neither is directly related to 'me'/I', and previous authors have suggested that one ('When I decide who to be friends with . . .') might be prone to socially desirable responding (Bottomley et al. 2010).

Our finding of higher levels of all our consumerism measures among males is consistent with most other studies (Churchill and Moschis 1979, Goldberg *et al.* 2003, Flouri 2004, Kasser 2005). Males also had higher numbers of 'premium' possessions, but the difference was small. Although this could reflect a male bias in our list of 'technology', it is notable that a number of these items were actually more likely to be owned by females, with the largest male excess in respect of 'premium' games consoles. It would be very difficult to construct a list of age-appropriate items which would not otherwise be highly gendered (e.g. particular brands of clothing; make-up). A US study of material dimensions of social status, conducted in 2006 among 14–18 year olds noted the importance of 'higher-priced material goods', including technology such as iPods, particular brands of mobile phone, laptop

computers and Bluetooth (Sweet 2010). Any school year group differences in material possessions and consumerism were small and inconsistent, again supporting other studies (Ward and Wackman 1971, Goldberg *et al.* 2003).

Most studies suggest greater consumerism among those from lower SES backgrounds. Our findings suggest different SES patterning for different dimensions of consumerism. Pupils from less affluent families reported greater 'dissatisfaction'. However, the more affluent had more 'premium' possessions, greater 'brand awareness' and 'consumer orientation'. This might be expected, given the greater resources of the more affluent. It is also in line with an earlier US study which suggested greater recognition of the symbolism of such products among 9–12 year olds from higher, compared with lower SES backgrounds (Belk *et al.* 1984). However, it contrasts with a Scottish study which found that while book ownership was more likely among adolescents from more affluent households, items representing 'new consumer' possessions were more likely among the less affluent (West *et al.* 2006). Similarly, a qualitative study of English 15–16 year olds found that those from low-income households placed greater importance on visible 'status' symbols, expensive clothing brands and money than their high-income peers (Isaksen and Roper 2012).

Analyses of the associations between consumerism and well-being included two 'control' variables, year group (age) and family affluence. In line with other studies, (e.g. Nolen-Hoeksema and Girgus 1994, Sweeting and West 2003) we found evidence of greater reductions in well-being with increasing age among females than males. While there was evidence of poorer well-being among males from lower family affluence groups, in females there were no significant differences according to affluence, consistent with suggestions that when compared with childhood or adulthood, youth is a period of 'relative equality' in health (West and Sweeting 2004).

Our finding that the different dimensions of consumerism were associated with different aspects of adolescent well-being in different ways and to different degrees is important and highlights the need for studies of consumerism to clearly and consistently define the concept(s) measured. As an aspect of well-being, anger was distinguished from self-esteem and distress. Adolescents with greater numbers of both 'standard' and 'premium' possessions were more likely to report that 'I get angry whenever anyone tells me what to do', perhaps reflecting greater narcissistic characteristics. Previous studies have found associations between increased levels of consumerism and both poorer relationships and more aggressive tendencies towards others (Kasser 2003). Relationships between possessions and both self-esteem and distress were less consistent. However, 'dissatisfaction' had stronger associations with these two measures of well-being than with anger. Previous studies have attributed such findings to an overreliance on unfulfilling, extrinsic relations with objects rather than more rewarding relations with people (Kasser and Ryan 1993), a focus on the acquisition of possessions in an unsuccessful attempt to offset feelings of unhappiness or insecurity (Chaplin and John 2007) and the belief that there is more to life than what one currently has (Bottomley et al. 2010, Eckersley 2011).

Results were further complicated by the finding that certain aspects of consumerism were associated with well-being in different ways for different groups. 'Brand awareness' was related to better male, but worse female well-being. Previous studies have found that brand name clothing is particularly important for adolescent

social status (Sweet 2010, Isaksen and Roper 2012). In adolescence, male 'brand awareness' may be particularly associated with sports-related clothes and accessories (at a life-stage when sporting prowess or affiliation are highly valued), while 'brand aware' females may be 'top girls' experiencing stress associated with maintaining peer-status (Michell and Amos 1997, West et al. 2010). Alternatively, more insecure females may seek to bolster well-being and position in the pecking order through brand choice, 'cool' clothes and possessions; quite literally 'retail therapy'. Previous studies have suggested consumerism might be more detrimental for less affluent individuals (La Barbera and Gurhan 1997, Burroughs and Rindfleisch 2002, Isaksen and Roper 2008). We found some evidence that greater numbers of 'standard' possessions were associated with higher self-esteem among less affluent adolescents (among whom having some possessions might be better than having none), but lower self-esteem among the more affluent (among whom 'premium' possessions were common). However, this was the only instance where the associations between consumerism and well-being differed by family affluence. The balance of the evidence from this study is therefore that consumerism is neither better nor worse for early adolescents from lower SES backgrounds.

This study adds to the body of evidence suggesting that some aspects of consumerism are related to adolescent well-being. In so doing, it highlights the importance of focusing on not only socio-economic, but also cultural factors, in relation to health (Eckersley 2011). It is one of only a handful of such studies conducted in the UK, and based on a large sample. An important limitation is that like almost all studies in this area, it is cross-sectional, thus limiting conclusions about causation (Eckersley 2006). Some of the associations, particularly between 'dissatisfaction' and poorer well-being may result from shared method variance. Poorer well-being may also lead to greater dissatisfaction or, as suggested earlier, attempts to increase happiness via the accumulation of possessions (Belk 1985) or style/labels. Although structural equation modelling in one (cross-sectional) study of American pre-adolescents suggested that the direction of effect was from consumer involvement to poorer well-being, rather than the reverse (Schor 2004), an alternative conclusion is suggested by the findings of others that inducing high self-esteem reduces expressions of consumerism (Chaplin and John 2007, Park and John 2011). Path models in studies of UK and Dutch pre-teens have suggested that relationships between consumerism and both self-esteem and parent-child conflict, are mediated by attitude to parents (Nairn et al. 2007) and that consumerism is related to disappointment via purchase requests (Buijzen and Valkenburg 2003).

In conclusion, this study suggests it may be important to temper the notion that consumerism *in general* is detrimental to psychological health and well-being. Rather, *certain aspects* of consumerism, particularly dissatisfaction, might be associated with poorer well-being, others may be unrelated to well-being and, for some sub-groups, yet others related to greater well-being. However, in line with suggestions that material goods do not contribute directly to young people's happiness (UNICEF UK/Ipsos Mori 2011), there was no evidence from this sample of western early adolescents that large numbers of modern consumer goods increased well-being. This is an important message, although difficult to communicate amid the plethora of media marketing and advertising in contemporary society.

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Note

1. Previous studies have used both terms and the concepts are often used interchangeably. For the purposes of simplicity and consistency, the term 'consumerism' is used throughout this article, with the exception of the one case where a 'Materialism Scale' is referred to.

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