Youth Spending and Geodemographics: A Review of Research into Adolescent Consumers

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Summary

Our research seeks to undertake an exploratory analysis of adolescents' consumer data. Our primary aim is to understand how variations in youth spending and earnings vary by demographics, and also by their neighbourhood characteristics. As the vast majority of consumer datasets focus on adults, little is known about how adolescents interact with the retail market as they age. The eventual aim is that the findings from our future research can be used to guide the production of youth geodemographic datasets using data pooled from a range of sources.

KEYWORDS: socio-economics, youths, geodemographics, consumption, spending

1. Introduction

Whilst traditional geodemographic classifications were developed to segment the consumer traits of adults and households, little is known about the economic behaviour of juniors (Harris *et al*, 2005). Although relatively negligible in comparison to adults, adolescent spending still accumulates to a considerable volume. The population of those aged 8 to 17 stood at almost 7.4 million in the 2011 Census, and many of whom would obtain money through completing chores and receiving regular allowances from their guardians. They also have different consumption habits to adults, so research into the consumer behaviour of this group is of particular importance.

Our research seeks to undertake an exploratory analysis of adolescents' consumer behaviour as predicted from data provided by a youth banking card provider. Using their transaction line data and customer accounts, the study will provide a valuable insight into how juniors manage their pocket money and how they spend it. Our primary objectives are to acquire a clearer idea about their consumption habits and understand if the consumption pattern they follow correspond with local geodemographics characteristics. It will first evaluate the representativeness of the data provided by the youth banking card provider by comparing the card holders and their characteristics to population estimates from the 2011 Census. Secondly, we will explore trends and variations in youth consumer behaviour across the UK. The eventual aim is that the data can be pooled with other data on the population to produce a youth geodemographic classification.

The information provided from the research will be useful to retail companies seeking to establish better insight into this invisible demographic. It could pose as an opportunity to redefine their marketing strategy to compliment the demands of this unique customer group (Spero and Stone, 2004). Prior to commencing the analysis, this paper outlines the background to our research.

2. Background

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Analysis into consumer behaviour usually only considers adults or households as a single unit, this neglects adolescents who are a dynamic customer group with unique saving and consumption habits. Previous research and analysis into consumers has also relied on drawing assumptions on consumption habits from local demographic and socio-economic characteristics (Harris *et al*, 2005). However, using aggregate fails to establish micro-level variations in consumer behaviour, and indeed there has been a wealth of research on predicted such discrete patterns in consumerism (Hensher and Johnson, 1981)

2.1 Adolescents as consumers

Adolescents are a unique consumer group because they are not economically independent (Šramová, 2015). Furthermore, their spending habits may also influence their consumption behaviour in their later lives (Palan *et al.*, 2010). Although their capital may be limited, it is disposable. For the majority of children, no funds are diverted towards living costs and sustenance. Instead, their money is spent on leisure activities, entertainment goods and gifts. A survey published by the Guardian indicated that children who receive an allowance per week (the amount of allowance differs) prefer to buy things for themselves or presents for their family and friends (The Guardian, 2002). Youths can adopt the habits of a rational consumer but in order to do that they have to enhance their skills and their knowledge regarding money and markets (Kjeldgaard and Askegaard, 2006; Šramová, 2015).

2.2 Age and consumer behaviour

Age plays a significant role in consumer behaviour, especially amongst adolescents. As youths mature through adolescenthood, their needs and personal interests develop and change considerably. Yoon and Cole (2008) mention that it is important to focus on young consumers' ages due to the fact that it is linked to intra – individual and other coherent factors such as life-style choices or the behaviour of parents, and these factors lead to different purchasing habits. Furthermore, it has been noted that in different age groups, life experiences, knowledge of new technology (Rence, 2006) and knowledge of money (Abramovitch *et al.*, 1991) vary. Thus, notable distinctions between adolescents as they mature, are observed. Toys, games, shows and films developed for youths are typically targeted at a particular age range. We would, therefore, expect the consumer behaviour of a child to vary substantially from a young teenager, despite both age groups being economically distinctive from the adult population.

2.3 Gender and consumer behaviour

Gender also influences consumer choices, and this is also experienced amongst adolescents (Mokhlis and Salleh, 2009). For instance, male consumers are less likely to follow fashion trends and they tend to be less confused during their purchases compared to females (Mokhlis and Salleh, 2009) Research has also found that girls are more likely to buy new products even if old products still meet their expectations (Mitchell and Walsh, 2001). Generally, there are gendered differences between consumers' expectations, their desires and their needs and these are also likely to be experienced amongst youths (Abdel *et al.*, 2013). One study found that girls have the inclination to spend a higher proportion of their earnings in comparison to boys (Abramovitch *et al.*, 1991).

2.4 Socio-economics

The socio-economic background of adolescents' families will also influence their consumer behaviour. Families are children's first medium of socialization, therefore young consumers may be easily influenced by their parents' consumption habits and lifestyle choices (International Markets Bureau, 2012). And obviously, the ability to spend money is, of course, dependent on the allowances guardians provide for youths. Wealthier parents are able to provide greater allowances for their children, and therefore, these children could be expected to spend more (Katona, 1975).

Furthermore, according to (Stavkova, Stejskal, and Toufarova, 2008), cultural, social, personal and psychological factors have a strong impact on a buyer's behaviour. So, in order to closely approach the

demands of this consumer group in a more effective way, retailers should take into consideration and evaluate these characteristics from various parts of the demographic spectrum.

2.5 Geodemographics and Geodemographic Classifications

Geodemographic classifications have long been considered a valid tool for segmenting the population in order to predict consumer behaviour at a small area level (Harris *et al*, 2005). They are based on the assumption that multivariate neighbourhood data can be clustered to form homogenous groups, which are also typically homogenous of consumer habits too. Conventional classifications are also assume that 'birds of a feather, flock together' (Harris *et al*, 2005). There are a wide range of geodemographic classifications, which include open source classifications consisting of open data (such as the 2011 Output Area Classification), to privately produced classifications which often contain large volumes of market and administrative data.

Whilst geodemographic classifications are typically comprehensive and encompass variables on several domains of neighbourhood characteristics (such as demographics, socio-economics, housing, etc...). There is also great value in developing more specific bespoke classifications in order to gain a more intricate understanding of a particular aspect of geodemographics. One example is the Internet User Classification which clustered local demographic characteristics with internet usage data from the Oxford Internet Survey to segment internet engagement at a small area level (Singleton *et al*, 2016). Another example is the Cultural, Ethnic and Linguistic Output Area Classification for England and Wales which only includes variables pertaining to ethnic identity in order to understand variations in cultural segregation (Lansley *et al*, 2015). Both bespoke classifications provide unique geodemographic insights useful for retailers.

3. Methodology

For our study, the card account details of over 70,000 adolescents (aged 8 and above) were supplied from a youth banking card provider. The data includes both card transaction line data which recorded several key details for each transaction per annoymised customer ID including the transaction value, name of the retailer, and the date. In addition, data on the payments into the accounts from the parents/guardians' associated accounts have also been provided. From this data, it is possible to observe trends in pocket money and informal task setting. For example, if a guardian pays an account holder £5 for washing their car both the payment and the name of the task would be recorded.

The postcode of each customer is also provided, which meant it is possible to append the data to Census Output Areas using the ONS postal directory. Output Areas are small spatial aggregate geographical units which represent an average population of 309. From this, our research will link the youth banking card data to neighbourhood characteristics recorded by the 2011 Census.

The data linkage allows us to observe how the adolescents' financial traits may be influenced by local geodemographic characteristics at the small area level, notably including indicators of socioeconomics. The linkage also invites the possibility of pooling data to form a bespoke junior youth output area classification

The data from the youth banking card provider was obtained in 2015 and is currently stored within the Consumer Data Research Centre's secure laboratory facility for data protection reasons. The subsequent research will only present annoymised and aggregated results due to the sensitivity of the data.

4. Conclusions

It is anticipated that the research will provide a comprehensive insight into adolescents' consumer behaviour and how it varies across the UK. Moreover, the research will identify if the consumption traits of the youth population at a small area level are associated with the traits of the local adult population. The information derived from the study can also be useful to supplement existing geodemographic models of small areas, and could possibly even be pooled with selected data sets to produce a bespoke youth geodemographic classification.

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6. Biography

Chrysanthi Kollia is an M.Res student of Urban Sustainability and Resilience in the Department of Civil, Environmental and Geomatic Engineering at UCL, undertaking the first year of her PhD in Retail Sustainability and Resilience linked to Consumer Data Research Centre issues. Chrysanthi holds an MSc in economics, with specialization in urban economics from Panteion University of Political and Social Sciences, in Athens. Her interests are in adolescents' consumption patterns and spatial analysis in retail activities.

Guy Lansley is a Research Associate at the Consumer Data Research Centre, UCL, an ESRC Data Investment. His previous research at UCL has included exploring the temporal geo-demographics derived from social media data, and identifying socio-spatial patterns in car model ownership in conjunction with the Department for Transport. His current work entails exploring population data derived from large consumer datasets.

References

Abdel, M., Saleh, H., and Alhoshan, L. (2013). Impact of Gender, Age and Income on Consumers' Purchasing Responsiveness to Free-Product Samples. *Research Journal of International Studies*, 26(26), 83–94.

Abramovitch, R., Freedman, J. L., and Pliner, P. (1991). Children and money: getting an allowance, credit versus cash, and knowledge of pricing*. Journal of Economic Psychology, 12, 27–45

Begg, D., Fischer, S., and Dornbusch, R. (2003). Economics. London: McGraw-Hill

Goodwin, N., Nelson, J. a, Ackerman, F., and Weisskopf, T. (2008). Consumption and the Consumer Society. Journal of Law and Society, 36(1), 32–54

Harris R, Sleight P, Webber R. (2005) Geodemographics: neighbourhood targeting and GIS. Chichester, UK: John Wiley and Sons.

Hensher, D. A. and Johnson, L. W. (1981), Applied Discrete Choice Modeling, London: Croom-Helm/New York: John Wiley.

International Markets Bureau. (2012). Global Consumer Trends Age Demographics, (August), 1–20.

Katona, G. (1975). Psychological economics. New York: Elsevier

Kjeldgaard, D., and Askegaard, S. (2006). The Glocalization of Youth Culture: The Global Youth Segment as Structures of Common Difference. *Journal of Consumer Research*, 33(2), 231–247. http://doi.org/10.1086/506304 Lansley, G., Wei, Y. and Rains, T. (2015) Identifying the Major Traits of Ethnic Clustering in England and Wales from the 2011 Census. *The Consumer Data Research Centre Working Paper Series*, 01, September 2015

Lewis, A., and Scott, A. (2000). The economic awareness, knowledge and pocket money practices of a sample of UK adolescents: A study of economic socialization and economic psychology. Children's Social and Economics Education, 4, 34–46

Mitchell, V., and Walsh, G. (2001). Gender differences in German consumer decision-making styles. *Journal of Consumer Behaviour*, *3*(4), 331–346. http://doi.org/10.1111/j.1745-6606.2001.tb00103.x

Mokhlis, S., and Salleh, H. (2009). Consumer Decision Making Styles In Malaysia: An Exploratory Study Of Gender Differences. *European Journal of Social Sciences*, *10*(4), 574–584. Retrieved from http://pdf.aminer.org/000/309/309/gender_differences_in_online_shoppers_decision_making_styles.p df

Palan, K. M., Gentina, E., and Muratore, I. (2010). Adolescent consumption autonomy: A cross-culturalexamination.Journal of Business Research, 63(12), 1342–1348.http://doi.org/10.1016/j.jbusres.2010.01.001

Rence, E. (2006). What Drives Consumer Behavior? Lets Talk Business, (116), 34-35.

Schuurman, N., (2004). GIS: A short introduction. Malden, MA: Blackwell

Singleton, A.D., Dolega, L., Riddlesden, D. and Longley, P.A. (2016) Measuring the spatial vulnerability of retail centres to online consumption through a framework of e-resilience, Geoforum, 69; 5-18,

Spero, I., and Stone, M. (2004). Agents of change: how young consumers are changing the world of marketing. Qualitative Market Research: An International Journal, 7(2), 153–159

Šramová, B. (2015). Marketing and Media Communications Targeted to Children as Consumers. *Procedia - Social and Behavioral Sciences*, 191, 1522–1527. http://doi.org/10.1016/j.sbspro.2015.04.568

Stavkova, J., Stejskal, L., and Toufarova, Z. (2008). Factors influencing consumer behaviour. Agricultural Economics-Zemedelska Ekonomika, 54, 276–284

Theguardian, (2002). "I like to buy tracksuitsand trainers". [Online] Available at http://www.theguardian.com/lifeandstyle/2002/mar/20/familyandrelationships.bbc [Accessed 9 November 2015]

Yoon, C., and Cole, C. a. (2008). Aging and consumer behavior. *Handbook of Consumer Psychology*, 247–270.