ESM00385X1 Field Observation of Shopping Bag Behaviour

Variable List

# Location variables

## CONTEXT

A nominal variable of 4 numeric characters indicating the context that the observation took part in.

The code indicates the Year, Country, Supermarket, and Time of day for each observation.

* The first digit indicates the year of the observation, using ‘1’ to indicate 2015, and ‘2’ to indicate 2016
* The second digit indicates the Country of the observation, using ‘1’ to indicate Wales, and ‘2’ to indicate England.
* The third digit indicates the supermarket that the observation took place, using ‘0’ to indicate a local store of a mid-range supermarket brand, ‘1’ indicates the observation took place at a budget supermarket, ‘2’ indicates the observation took place at a premium supermarket, and ‘3’ indicates that the observation took place at a mid-range supermarket.
* The fourth digit indicates the time of day that the observation occurred, using ‘0’ to indicate a weekday morning (1030-1130), ‘1’ to indicate a weekday evening (1630-1730), ‘2’ to indicate a Saturday morning (1100 – 1200), and ‘3’ to indicate a Saturday afternoon (1300-1400).

For example:

* “1203” would indicate an observation in 2015, in England, at a local supermarket store on a Saturday afternoon (1300-1400)
* “2121” would indicate an observation in 2016, in Wales, at a budget supermarket on a weekday afternoon (1630 – 1730)
* “1223” would indicate an observation in 2015, in England, at a premium supermarket on a Saturday afternoon (1300-1400).

## IDCODE

The unique 8-digit ID code for each observation recorded.

The first 4 digits use the code structure from variable “CONTEXT”, and the latter 3 digits indicate the number of the observation that took place within each context group.

For example:

* “11200002” indicates the 2nd observation (“0002”) that took place in 2015, in Wales, at a premium supermarket, on a weekday morning (“1120”).
* “2210076” indicates the 76th observation (“0076”) that took place in 2016, in England, at a budget supermarket on a weekday morning (“2210).

## Year

The year that the observation took place.

Uses “0” to indicate 2015, or “1” to indicate 2016.

## Country

The country that the observation took place.

Uses “0” to indicate Wales, and “1” to indicate England.

## Supermarket

The supermarket store that the observation took place.

Four stores were used; a small local store, and three large supermarket stores. Supermarkets were classified by their socio-demographic profile using data from YouGov Profiles (<https://yougov.co.uk/find-solutions/profiles/>), a market research company that uses survey data to determine likely characteristics of people who shop at different stores. Using the National Readership Survey (NRS) classification of Social Grade, two socio-demographic groups are considered; those rated “ABC1” are designated as upper class to lower middle class, and those rated “C2DE” are designated as skilled working class to non-working.

The UK general population is 52% ABC1, YouGov gives likely proportions of each supermarket where observations took place, giving three definitions of the stores observed; Budget, Mid-Range, and Premium. For the Budget store, 46% of shoppers were ABC1, for the Mid-range stores 58% of shoppers were ABC1, and at the Premium store 73% of shoppers were ABC1.

Using these classifications, the variable uses “0” to indicate local store, “1” to indicate observation took place at the Budget supermarket, “2” to indicate the observation took place at the Premium supermarket, and “3” to indicate the observation took place at the Mid-range supermarket.

## Time

The time and day that the observation took place.

Uses “0” to indicate a weekday (Monday to Friday) observation that took place in the morning (between 1030 and 1130), “1” to indicate a weekday observation that took place in the evening (between 1630 and 1730), “2” to indicate a Saturday observation that took place in the morning (between 1100 and 1200), and “3” to indicate a Saturday observation that took place in the afternoon (between 1300 and 1400).

## Weather

The weather at the time that the observation took place.

Uses “0” to indicate sunny weather, “1” to indicate cloudy weather, and “2” to indicate rainy weather.

# Demographic variables

## ObsSize

The size of the observed party.

Ordinal variable indicating the number of adults observed to exit the store, for example alone, as a couple, or as a larger group.

## FemaleN

The number of women in the observed party.

## MaleN

The number of men in the observed party.

## Gender

The gender of the observed party.

If the observed party was >1, a single measure of gender would not be appropriate. Therefore, three separate codes were used; “0” indicates that the observed party was male, “1” indicates that the observed party was female, and “2” indicates that the observed party was more than 1 person, and that gender would not be a suitable measure.

## Age

The estimated age of the observed party.

As an observational study with limited time for assessment, age was broadly defined into thee main groups, using “0” for those aged 18-35 years, “1” for those aged 36 to 55 years, and “2” for those aged 56 years or older.

Additional value of “4” used for groups where observation sample size is greater than 1, indicating that a single measure of age would not be a suitable measure.

## Child

Whether the observed party was seen to be with a child.

Uses “0” to indicate no child observed, and “1” to indicate a child was observed.

# Bag use variables

## SUPB\_Own

The total number of Single Use Plastic Bags (SUPBs) observed as being used, and with the same branding as the store the observation took place.

For example, an observation at the budget supermarket of SUPBs being used, and the SUPBs have the branding of the budget supermarket.

## SUPB\_Other

The total number of Single Use Plastic Bags (SUPBs) observed as being used, but with different branding as the store the observation took place.

For example, an observation at the budget supermarket of SUPBs being used, but the SUPBs have the branding of the mid-range supermarket.

## SUPBBinary

Indicates whether the observation was seen to be using Single Use Plastic Bags (SUPBs), independent of branding and number of bags.

## SUPBSum

Sum total number of Single Use Plastic Bags (SUPBs) seen in the observation, independent of branding of bags.

## B4L\_Own

The total number of reusable “Bags for Life” (B4L) observed as being used, and with the same branding as the store the observation took place.

For example, an observation at the budget supermarket of B4L being used, and the B4L have the branding of the budget supermarket.

## B4L\_Other

The total number of reusable “Bags for Life” (B4L) observed as being used, but with different branding as the store the observation took place.

For example, an observation at the budget supermarket of B4L being used, but the B4L have the branding of the mid-range supermarket.

## B4LBinary

Indicates whether the observation was seen to be using “Bags for Life” (B4L), independent of branding and number of bags.

Uses “0” for no B4L observed, and “1” to indicate B4L observed.

## B4LSum

Sum total number of “Bags for Life” (B4L) seen in the observation, independent of branding of bags.

## CANVAS

The total number of woven/canvas/tote shopping bags observed as being used.

## CANVASBinary

Indicates whether the observation was seen to be using woven/canvas/tote shopping bags, independent of how many woven/canvas/tote bags were used.

Uses “0” for no woven/canvas/tote observed, and “1” to indicate woven/canvas/tote observed.

## OWNBAGBinary

Indicates whether the observation was seen to be using their own shopping bag, that is a Bag for Life (B4L) or a woven/canvas/tote shopping bag.

Uses “0” for no B4L or woven/canvas/tote observed, and “1” to indicate B4L or woven/canvas/tote observed.

## OWNBAGSum

The total number of own shopping bags used, that is, the total number of Bags for Life (B4L) or woven/canvas/tote shopping bags used.

## Other\_Rucksack

Indicates whether the observation was seen to be using a Rucksack/Backpack.

Uses “0” for no Rucksack/Backpack observed, and “1” to indicate Rucksack/Backpack observed.

## Other\_Handbag

Indicates whether the observation was seen to be using a handbag.

Uses “0” for no handbag observed, and “1” to indicate handbag observed.

## Other\_Other

Indicates whether the observation was seen to be using an unspecified container, e.g. trolley, cardboard box, etc.

Uses “0” for no unspecified container observed, and “1” to indicate unspecified container observed.

## NoShoppingBag

Indicates whether the observation was seen to not use a conventional shopping bag, i.e., not using a Single Use Plastic Bag (SUPB), or a Bag for Life (B4L), or a woven/canvas/tote bag.

Uses “0” for conventional shopping bag observed (SUPB, B4L, or woven/canvas/tote), and “1” to indicate that no conventional shopping bag was observed.

## OtherBag

Indicates whether the observation was seen to use a non-conventional shopping bag, i.e., using a Rucksack/Backpack, handbag, or unspecified container.

Uses “0” for conventional shopping bag observed (SUPB, B4L, or woven/canvas/tote), and “1” to indicate that no conventional shopping bag (Rucksack/Backpack, handbag, or unspecified container) was observed

## BagUseGroup

Grouped classification of observation to indicate manner of shopping bags used.

Five classifcations are used, calculated in the following way:

* “1” = Only SUPB used *(SUPBBinary=1 & OWNBAGBinary=0)*
* “2” = SUPB & Own bags used *(SUPBBinary=1 & OWNBAGBinary=1)*
* “3” = Only Own bags used *(SUPBBinary=0 & OWNBAGBinary=1)*
* “4” = Only non-conventioanl bags used *(SUPBBinary=0 & OWNBAGBinary=0 & OtherBag = 1)*
* “5” = No bags used *(SUPBBinary=0 & OWNBAGBinary=0 & OtherBag = 0)*